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Bombay Municipality.

RECORD OF THE PROCEEDINGS

OF

THE STANDING COMMITTEE,

1893-94.

133799

PART II.

VOL. XVII.

Part II.—PROCEEDINGS OF THE STANDING COMMITTEE AND APPENDICES.

PREPARED BY THE

MUNICIPAL SECRETARY.

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PART II.

PROCEEDINGS OF THE STANDING COMMITTEE OF THE MUNICIPAL CORPORATION OF BOMBAY.

BOMBAY, *5th April* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

ABDALLA M. DHARAMSI, Esq., B.A., LL.B. ; BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; COWASJEE HORMUSJEE, Esq., C.I.M.C. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; K. M. SHROFF, Esq. ; R. G. OXENHAM, Esq., M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

Proposed by Hurkisondas Nurrotumdas, Esq., and seconded by Bhalchandra K. Bhatwadekar, Esq.—

"That Mr. E. B. Carroll do take the chair."

Carried.

The minutes of the meeting held on the 29th ultimo were signed.

In accordance with notice, it was

Proposed by Grattan Geary, Esq., and seconded by Javerilal U. Yajnik, Esq.—

No. 94. "That Cowasjee Hormusjee, Esq., be re-appointed Chairman of the Standing Committee for the year 1893-94."

Carried with acclamation.

Mr. Cowasjee Hormusjee, having taken the chair, expressed his thanks for the honour conferred on him by the Committee in thus re-electing him.

The seal of the Corporation was affixed (1) to deed of agreement for lease of land to Messrs. Heptula Sheik Adam & Co. situate at French Bridge ; (2) to deed of contract with Mr. Hormasji Jehangir for the supply of road metal during 1893-94 ; (3) to ditto with Messrs. Amrita Babaji, Vachhaghandy, Bhedwar & Co. for the supply of sandstone, sand, shells and shingle during 1893-94 ; and (4) to ditto with Messrs. Hassonalli Mulla Hakimji & Bros. for the supply of timber during 1893-94.

Resolved : "That, as applied for by the Commissioner, in his memoranda Nos. 30 and 31, dated this day, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

No. 99.

Names of Owners.	Where.
Messrs. Sadanund Shricrishna and Hurry Shridhur ...	... Building at Parel Road (Lalwadi).
Hadji Jan Mahomed Latiff... ...	Do. at Dadar do."

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 96, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 100.

Resolved : "That, as applied for by the Commissioner, in his letter No. 28266, dated 28th ultimo, sanction be given, under section 216 of the Municipal Act, to the writing off of Rs. 478-12-0, being the amount of irrecoverable bills in respect of property, wheel, water, and halalkhor taxes, &c., as per list submitted with the letter. That the Commissioner be asked to give renewed directions to the Assessor and Collector to take care that, as far as possible, wheel tax bills should not be allowed to remain in arrears for more than one quarter, and that no horses or vehicles liable to wheel tax be allowed to escape payment. That renewed efforts should be made to recover the wheel taxes due by Captain Fenn and J. Forrest."

No. 101.

Resolved : "That the following be *recorded* :—Letter No. 28295, dated 28th ultimo, from the Commissioner reporting that he has entrusted the work of repitching banks of siphon No. 6 Tansa duct to Messrs. Walsh, Lovett, Mitchell & Co. at a cost of Rs. 977. The amount to be met out of Rs. 1,244 provided for this work in the final revised estimate of the Tansa Works, sanctioned as per the Corporation's resolution No. 12693, dated 23rd February last."

No. 102.

Resolved : "That the following be *recorded* :—Letter No. 28260, dated 28th ultimo, from the Commissioner, reporting that he has sold the following rights of cutting grass, removing mangoes, &c., on the

No. 103.

Tansa duct lands, to Messrs. Rambhao Vithoba and Dhaku bin Mal Patel, for one year, ending 31st January 1894, for Rs. 100 :—

(1). Taking grass and removing fruits from mango and other Injaili trees on the Municipal land near the Tansa dam and for cultivating the same,—area 270 acres.

(2). Taking grass and removing fruits from mango and other Injaili trees from the duct line to tunnel No. 2 and for cultivating a piece of ground at Khosta,—area 27 acres.

(3). Taking grass and removing fruits from mango and other Injaili trees from the Tansa Duct line from tunnel No. 2 to tunnel No. 3, and for cultivating the rice land at Vandra,—area 36 acres."

Resolved : "That the following be *recorded* :—Letter No. 104. No. 28441, dated 29th ultimo, from the Commissioner, reporting that he has sold the right of cutting grass on the sides of the water-course at Elphinstone Road for the year 1893-94, to Dewoo Hurset, for Rs. 10, including the charge for general tax which amounts to As. 14."

Resolved : "That the following be *recorded* :—Memo-
No. 105. randa Nos. 28268 and 28269, dated 28th ultimo, from the Commissioner, reporting, with reference to the resolutions of the Committee, Nos. 5620 and 4484, dated 9th January 1889 and 3rd October 1888, the transfers (1) of 5 per cent. Municipal Debentures for Rs. 3,000 at par from the surplus cash deposit account to the Municipal Buildings Fire Insurance Fund Deposit Account, on 20th ultimo ; (2) of Rs. 3,00,000, from the 35 lakhs Various Sanitary Works Loan Deposit Account to the Municipal General Fund Pass Book, on 20th and 24th idem."*

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* The Chief Accountant reports to the Commissioner, that the balances standing to the above accounts after effecting the transfers are as under :—

			Rs.	a.	p.
(1)	In 5 per cent. Municipal Debentures for Rs. 24,89,500 at par	=	24,89,500	0	0
	„ 4 Do. do. do. „ 27,000 „ „	=	27,000	0	0
	„ 4 Do. Government Paper for „ 4,33,000 ...	=	4,31,700	5	0
	In Cash		6,025	0	0
		Rs.	29,04,225	5	0
(2)	In 4 per cent. Government Paper for Rs. 8,54,100...	= Rs.	8,80,488	10	0
	In Cash	„	17,198	3	1
		Rs.	8,97,686	13	1

Resolved : "That Government Resolution No. 1068, General Department, dated 28th ultimo, be forwarded to the Corporation, with reference to the resolution of the Committee, No. 11323, dated 1st February 1893, with the recommendation that the Commissioner be authorised to take the necessary steps for acquiring the land on the terms stated in the above resolution of Government."

No. 106.

Resolved : "That, with reference to letter, dated 1st March 1893, from Mr. J. M. Moses, the Corporation be informed that the Commissioner has already issued orders for stopping the deposit of road scrapings on the foreshore, for filling in the surface with sweet earth, and for the erection of a rough ramp to prevent access by the tide.

No. 107.

"That an estimate is being made of the cost of constructing tanks to receive sullage from the drains of the different houses emptying on the foreshore, and that these measures should prevent the nuisance complained of."

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 2nd April 1893.

Considered letter No. 4575 of 1892-93, dated 30th March 1893, to the Commissioner.

SIR,—As it will take some time to prepare detailed statements of the unexpended balances of the various lapsed grants (Revenue and Loan) for 1892-93 and previous years which require to be renewed during 1893-94, and as the sums legally due must be paid and works in progress carried on to completion, I have the honor to request the favour of your obtaining the sanction of the Standing Committee, under section 132 of the Municipal Act, in the following cases, *viz.*—(1) Payments for sanctioned works already done and for establishment and labour already employed; (2) payments for stores, stationery and other supplies already bought or used, and for printing, advertisement and other contingent charges already incurred; (3) payment of interest and repayment of loans which became due during 1892-93 and previous years' bills, but which still remain unpaid; (4) adjustment of inter-departmental charges for 1892-93 and previous years; (5) payments towards completion of works still in progress up to the limits of the grants already sanctioned; (6) payments on account of pensions which

* *See* Appendix B.

became due in 1892-93, but which were not drawn by the parties on account of illness or other causes.

2. Detailed statements of the balances of the various grants requiring renewal will be submitted for the information of the Standing Committee as soon as the statements called for this day from the different Heads of Departments are received and the accounts for 1892-93 are finally closed.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

No. 8 of 1893-94.

4th April 1893.

Forwarded to the Standing Committee for favour of sanction.—H. A. ACWORTH, Commissioner.

No. 108. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 8, dated 4th instant, and pending the preparation of the detailed statement of unexpended balances of the various lapsed grants (Revenue and Loan) for 1892-93, on account of which sums legally due thereunder must be paid for works in progress and carried to completion, sanction be given, under the terms of section 132 of the Municipal Act, to the following payments, *viz.*:—(1) for sanctioned works already done and for establishment and labour already employed; (2) for stores, stationery and other supplies already bought or used, and for printing, advertising and other contingent charges already incurred; (3) on account of interest and repayment of loans which became due during 1892-93 and previous years, but which still remain unpaid; (4) adjustment of inter-departmental charges for 1892-93 and previous years; (5) towards completion of works still in progress up to the limits of the grants already sanctioned; and (6) payments on account of pensions and gratuities which became due in 1892-93, but which were not drawn by the pensioners on account of illness or other causes."

No. 109. *Resolved*: "That sanction be given to the promotion of the following clerks, &c., in the Municipal Secretary's office, as sanctioned in the Budget for 1893-94:—

Mr. Narayen R. Damle ...	...	...	...	to Rs.	65	a month.
„ H. Ferreira	...	...	...	„	60	„
„ Vinayak Bhasker ...	...	...	...	„	50	„
Havildar Hurri Suryaji ...	...	...	...	„	14	„
Boy Peon Laxuman Tanu	...	...	...	„	7	„

BOMBAY, 12*th April* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*

ABDALLA M. DHARAMSI, Esq., B.A., LL.B.; BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 5th instant, were signed.

Mr. Javerilal U. Yajnik informed the meeting that, on the previous day he was asked to sign a cheque which included the salary of a newly appointed female clerk. As the employment of female clerks is an entirely new arrangement, of which the Corporation has not been informed, he had thought it best to request that the salary of the clerk in question might not be disbursed until he had brought the subject to the notice of the Standing Committee.

The Committee expressed the opinion that, as the salary of the female clerk in question and the salaries of other female clerks who are also employed have been duly budgetted for, and as the Municipal Act invests the Commissioner with the power of appointing officers and servants, there was no objection to this cheque and similar cheques being duly signed.

No. 275.

The seal of the Corporation was affixed to deeds of contract (1) with Mr. Rastamji Nasarwanji Vachaghandy for filling in a portion of Naigaum Tank ; (2) with Messrs. Mistri, Bhedwar, Vachaghandy & Co., for the construction of a manual engine fire brigade station at Mahim ; (3) with the Gas Company for the supply of coke during the year 1893-94 ; and (4) to lease of ground at Tardeo Flats let to Mr. Bisasor Bindrabam for the purpose of stacking hay.

The seal was also affixed to 26 attested duplicate debentures of the Sanitary Works Loan of 1885, Nos. 325-328 NN, Nos. 1302-1315 NN, Nos. 2040-42 NN, Nos. 2542-43 NN, No. 3318 NN, No. 3120 NN and No. 3182 NN, of Rs. 500 each.

No. 280. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 707, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 281. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 327, dated 8th instant, sanction be given to the transfer of Rs. 82-8-0 from savings in the grant for general supervision, miscellaneous duties, 3, Surveyors and Draftsmen, Executive Engineer's Budget, to III, Water Works, 1, establishment and labour, to meet acting allowance payable to Mr. Merwanji M. Banaji during the absence of the Head Clerk, Water Works Department, who has gone on 3 months' privilege leave."

No. 282. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 328, dated 8th instant, sanction be given to the transfer of Rs. 122-9-3 from savings in the grant for general supervision, miscellaneous duties, 3, Surveyors and Draftsmen, Executive Engineer's Budget, to same head, 2, office establishment, to meet acting allowance payable to Mr. Lallubhai Dharamdas during the absence of the Chief Clerk who has gone on 3 months' privilege leave."

No. 283. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 242, dated 7th instant, the Corporation be recommended to sanction the writing off of Rs. 6,879-3-4, being the book-value of 30 bullocks of the Health Department that died,* one that was destroyed during the quarter ending 28th February 1893, and 76 which were sent to Pinjrapol during the same period, total 107 ; and of Rs. 1,180-11-6, being the book-value of one bullock of the Market Department that died during the same quarter and 11 bullocks sent to Pinjrapol during the same period, total 12."

No. 284. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 111, dated 5th instant, sanction be given to the continuance of the present arrangement of paying Mr. Ginger, head animal

* *Causes of death* :—11 old age and general debility, 2 pneumonia and enlargement of liver, 1 abscesses in heart, 2 congestion of liver and spleen ; 1 pleuro-pneumonia, 1 tuberculosis, 2 œdema, dewlap and throat, 1 foot and mouth disease, 4 inflammation of lungs, heart, &c., 1 diarrhœa, 1 hoven, 1 fracture of bone, 1 abdominal dropsy, 1 disorder of lungs. *Where died*—1 Null Bazaar, C Ward Stables, 26 Sankli Tank Bullock Hospital, 2 Kamathipura, E Ward Stables, 1 Foras Road, D Ward Stables.

keeper, Victoria Gardens, house-rent of Rs. 25 per month. The amount to be met out of the grant for 1893-94 for contingencies for the Gardens."

No. 285. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 319, dated 8th instant, sanction be given, under section 381 of the Municipal Act, to the serving of a notice upon Hadji Sulleman Abdull Wahid, requiring him to fill in with sweet earth a large water hole belonging to him at the back of his chawl at Clerk Road, as the drainage from the surrounding houses runs into this hole, and it is simply a pond of sewage."

No. 286. *Resolved* : "That the following be *recorded* :—Memorandum No. 52, dated 5th instant, from the Commissioner, to the Secretary, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the following transfers to the Municipal General Fund Pass Book, *viz.*, (*a*) of Rs. 9,20,382-13-9 from the 35 Lakhs various Sanitary Works Loan deposit account on 27th, 28th and 29th ultimo; (*b*) of Rs. 6,057-14-8 from the surplus cash deposit account on 27th ultimo; (*c*) of Rs. 500 from the 6 per cent. Municipal Loans Sinking Fund deposit account on ditto. Stating that the transfers already reported and those now reported aggregate Rs. 13,26,940-12-5, which is in excess of the limit of Rs. 13 lakhs fixed in the resolution of the Committee, No. 13208, dated 8th idem. Also reporting, with reference to the resolution of the Committee, No. 5620, dated 9th January 1889, the following transfers made from one invested fund to another, *viz.*, on 27th ultimo from the Municipal Buildings Fire Insurance Fund deposit account, (*a*) to the surplus cash deposit account Rs. 32-14-8 ; and on the same date from the surplus cash deposit account, (*b*) to a new account styled "the worn-out mains renewal" fund deposit account in 5 per cent. Municipal Debentures for 97,500 at par."*

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* The Chief Accountant reports to the Commissioner, that the balances standing to the above accounts after effecting the transfers are as under :—

(*a*)	*Nil.*				
(*b*)	In 5 per cent. Municipal Debentures for	Rs.	23,42,000 =	Rs.	23,42,000 0 0
	„ 4 do. „ „	„	27,000 =	„	27,000 0 0
	„ 4 do. Government Paper for	„	4,33,000 =	„	4,31,700 5 0
				Rs.	28,00,700 5 0
(*c*)	In cash			Rs.	1,000 0 0
(*d*)	In 5 per cent. Municipal Debentures for	Rs.	12,500 =	Rs.	12,500 0 0
	In cash			„	274 0 5
				Rs.	12,774 0 5

The following return was read and *recorded* :—

No. 287. Return of fires at Nesbit Lane (Mazagon), Matunga, Carnac Road, Piru Hill (Gowalia Tank), Mahim Bazar (Cross Road), Lower Colaba, Arthur Bunder, Charni Road (Bombay United Spinning and Weaving Company, Limited), DeLisle Road (Union Mill), and DeLisle Road (B. B. & C. I. Ry. Workshops), forwarded with the Commissioner's memoranda Nos. 34 and 445, dated 5th and 8th March 1893.*

The following statement † was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 9th April 1893.

BOMBAY, 19*th April* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
ABDALLA M. DHARAMSI, Esq., B.A., LL.B.; BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 12th instant, were signed.

The seal of the Corporation was affixed to deed of agreement (in duplicate) between Chagbai and Premabai, widows and executrixes of Dossa Morajee, and the Corporation, securing to the Municipality the right to acquire, at any future time, the set-back of property situated at No. 3—7, Garibdas Street, without payment of any compensation in respect of the unauthorised work, indicated on the plan annexed to the deed, and at the rate of Rs. 50 per square yard for any land shown on the plan scored red, to be there taken up, inclusive of any loss, damage or expense sustained by them by reason of such acquisition.

The seal was also affixed (1) to deed of agreement (in duplicate) with Mr. Charles Briggs for the erection of pumps, engines and boilers at Love Grove; and (2) to deed of contract with Mr. Dossabhai Burjorjee Padhra for the work of making and pitching the slopes of the portion of Haines Road which forms the boundary of the storm-water reservoir.

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* *See* Appendix **C**. † *See* Appendix **B**.

The seal was also affixed to 62 attested duplicate debentures, Nos. 1383, 1384 and 4275-4334 of the Municipal Loan of 1878 for Rs. 31,000; to 2 consolidated debentures, Nos. 4187-4206 for Rs. 10,000, and Nos. 4226-45 for Rs. 10,000 of the Municipal Loan of 1878; to 2 attested duplicate debentures, Nos. 656 and 13918 of the Tansa Water Works Loan, for Rs. 1,000; to 3 consolidated debentures, Nos. 15184-203 for Rs. 10,000, Nos. 14204-223 for Rs. 10,000, and Nos. 19571-90 for Rs. 10,000 of the Tansa Water Works Loan; to 4 attested duplicate debentures, No. 406 NN, Nos. 1081 NN, 1082 NN and No. 2360 NN of the Municipal Sanitary Works Loan for Rs. 2,000.

No. 642. *Resolved* : "That, as applied for by the Commissioner, in his memoranda Nos. 1039 and 1040, dated 17th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Bai Radhabai, widow of Mr. Krishnarao Bhau...	Building at Sewri Cross Road.
The representative of the late Mr. Parmanandas Jeewandas ...	Do. at No. 88-92, New Hanuman Lane."

No. 643. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 1244, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Read letter No. 1163, dated 18th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to state that tenders for the work of annual repairs and petty works and for the supply of building materials during 1893-94 were invited in accordance with the suggestion of the Executive Engineer, approved by the Standing Committee in their resolution No. 12859 of the 1st ultimo, and that the following 5 tenders have been received:—

(1) Messrs. Sadanand Jagannath and Goblabsing Bhojraj ... ... } Rs. 9¼ per cent. below the rates of the contract.
(2) Mr. Cooverji Nowroji ... ... „ 7 per cent. do.
(3) Mr. Muncherji Kavasji Gazder ... „ 5 per cent. do.
(4) Mr. Fakirji Dinshaw ... ... „ 2 per cent. do.
(5) Messrs. Adamji Abdulali and Ookabhoy Dawoodji ... ... } „ 17½ per cent. above the rates of the contract.

After the tenders were opened and were being considered by me, the tenderers No. 5 addressed letters to the Executive Engineer and to me stating that they, through a mistake, gave the rate of 17½ per cent. above, instead of below, the rates fixed by the Exe-

cutive Engineer in the contract. In justice to other tenderers, I enquired of them whether they would reduce their tenders.

Tenderers Nos. 1 and 4 have declined to make any reduction in their tenders. Tenderer No. 2 has come down to 13 per cent., and tenderer No. 3 to 15 per cent. below the contract rates. I have the honour, therefore, to request the sanction of the Standing Committee to accept the tender of Mr. Mancherji Kavasji Gazder at 15 per cent. below the contract rates. I do not recommend the acceptance of tender No. 5 for reasons which I will state to the Standing Committee personally.

I also request the sanction of the Standing Committee to the extension of time for the continuance of the last year's contract for petty works, &c., up to the end of the current month from which date the new contract will come into force.—I have, &c., H. A. ACWORTH.

No. 644. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1163, dated 18th instant, sanction be given to the acceptance by him of the tender of Mr. Muncherji K. Gazder for annual repairs and petty works and for the supply of building materials, at 15 per cent. below the rates fixed by the Executive Engineer. That, under the terms of section 69 (e) of the Municipal Act, sanction be given to the variation of Mr. Fakirji Pestonji's contract for annual repairs, &c., for 1892-93, so as to permit of the same continuing in force up to the end of the current month."

Amendment proposed by A. G. Viegas, Esq.—

"That the consideration of the question of the acceptance of tender for petty works and the supply of building materials be postponed, to allow of its being ascertained what loss the Municipality will suffer from the non-acceptance of the lowest tender."

Not seconded.

The original motion was *carried* (with one dissentient).

No. 645. *Resolved* : "That the following be *recorded*:—Letter No. 969, dated 15th instant, from the Commissioner, to the Secretary, reporting that he has accepted the tender of Messrs. Nowrojee, Spencer & Co., the lowest of 5 tenders received, for filling up and metalling the new ground at Chinchpokli at the junction of DeLisle and Clerk Roads. The amount, Rs. 2,789-6-0, to be met out of the budgetted provision of Rs. 2,882 for this work."

No. 646. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 995, dated 15th instant, the Corporation be recommended to sanction the further increase in the budgetted number of gas lamps

by three to provide for the lighting of a new urinal at Dalal Street. The cost of lighting, Rs. 18-6-0 per mensem, to be met out of savings in the grant for gas lighting, current year's budget."

No. 647. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 830, dated 13th instant, sanction be given, under section 69 (e) of the Municipal Act, to the variation of Messrs. Sitaram Luxmon and Bibra's contract for the construction of an engine house, &c., at Love Grove, so as to allow of the contract remaining in force till 31st May 1893."

No. 648. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 979, dated 15th instant, and under the terms of section 79 (2) of the Municipal Act, sanction be given to the modification of the schedule of appointments of the Love Grove Pumping Station so as to allow of the following alterations therein:—

Designation.	As sanctioned in the budget.		As re-arranged.		
	No. of persons.	Monthly rate.	No. of persons.	Monthly rate.	
1st Engineer	1	450	1	450	
2nd do.	1	300	1	300	
3rd do.	1	85	1	85	
4th do.	1	75	.....	.....	He will be required when the new engines are started.
Engine Driver	1	20	1	20	
Do.	1	20	1	20	
Do.	1	20	1	20	
Do.	1	20	.....	.....	Saving.
Winch Driver	1	20	1	15	Saving of Rs. 10.
Do.	1	20	1	15	
Assistant Packer	1	20	1	20	
Foreman	1	18	1	18	
Do.	1	18	1	18	
Do.	1	18	1	18	
Do.	1	18	.....	.....	Saving.
Oilmen	1	12	1	15	Increase of Rs. 9.
Do.	1	12	1	15	
Do.	1	12	1	15	
Fitter	1	40	1	40	
Do.	1	30	1	30	
Coalman	1	10	1	10	
Do.	1	10	1	10	
Do.	1	10	1	10	
Do.	1	10	1	10	
Do.	1	10	1	10	
Lightman	1	15	1	15	
Laskar	1	10	1	10	
Mali and Caretaker	1	10	1	10	
Kilnman	.....	.....	1	12	Increase of Rs. 24.
Do.	.....	.....	1	12	
	28	.....	27	.....	

Read letter No. 980, dated 15th instant, from the Commissioner, to the Secretary, as under :—

SIR,—With reference to my report No. 5 of 1st instant on a petition to the Corporation from certain residents of Colaba, I have the honor to report that the Executive Engineer has furnished me with plans and estimates (herewith forwarded) amounting to Rs. 3,386 for tanks and temporary drains. I have directed the work to proceed as the nuisance is too acute to admit of delay, but the miscellaneous drainage grant to which I have directed the cost to be debited is unable to bear such a charge, amounting, as it does, to only Rs. 5,000 for the whole year. I have, therefore, the honor to request that the amount may be sanctioned from surplus cash balance. The Drainage Engineer, the Executive Engineer and I are agreed that the measures proposed are the best for dealing with the case.

As the sum of Rs. 40,963-5-5 reserved in the revised estimates for 1892-93 for probable extra grants up to the end of March 1893 has been fully spent, the proposed expenditure can be met out of the surplus of 4 lakhs of rupees which have accrued since the revised estimates for 1892-93 were published.—I have, &c., H. A. ACWORTH, Commissioner.

No. 649. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 980, dated 15th instant, and in continuation of the resolution of the Committee No. 107, dated 5th idem, the Corporation be recommended to sanction the expenditure of Rs. 3,386 for cost of constructing tanks and temporary drains for the abatement of the nuisances complained of by the residents in the neighbourhood of Wodehouse Bridge, Colaba. The cost to be met out of the surplus of Rs. 4 lakhs on current revenue for the past year, which have accrued since the revised estimates for 1892-93 were published."

No. 650. *Resolved* : " That the following be *recorded* :—Letter No. 831, dated 13th instant, from the Commissioner to the Secretary, reporting that he has authorized the Secretary and Curator, Victoria and Albert Museum, to purchase 'The Challenger Expedition Reports on Zoology,' 32 volumes, at a cost of £80-18-0. for the use of the museum. The cost to be met partly out of the grant for the purchase of books and partly from the artware grant for 1893-94."

No. 651. *Resolved* : " That the following be *recorded* :—Letter No. 534, dated 10th instant, from the Commissioner to the Secretary, reporting, with reference to the resolution of the Committee, No. 10284, dated

16th December last, that the ground floor of the house purchased for the extension of the Bhuleshwar Market has been let to one Mr. Chuggan Purshotum at Rs. 76 per mensem from 1st February 1892, and the upper floors to one Mr. Morar Purshotum at Rs. 175 per mensem. The tenants to pay Municipal taxes, and the tenancy to cease at a month's notice."

No. 652. *Resolved*: "That, with reference to their resolution No. 5147, dated 18th August 1892, the Corporation be informed that Mr. Saisha R. Naidoo declines to contribute the Rs. 5,000, which, it is estimated, would be the cost of erecting a suitable drinking trough for cattle at the junction of Hornby and Paltan Roads."

No. 653. *Resolved*: "That the following be *recorded*:—Letter No. 845, dated 13th instant, from the Commissioner to the Secretary, reporting the sale of the following rights during 1893-94:—

Municipal Gardens, &c.	Name of the crop.	Name of the highest bidder.	Amount realised during 1892-93.	Amount realised during 1893-94.
			Rs. a. p.	Rs. a. p.
Victoria Gardens...	Mango crop ...	Ganu Tookaram ...	370 0 0	85 0 0
	Coccanut crop ...	do.	Not sold.	13 0 0
Bazar Gate do. ...	Mango crop ...	Madan Cutchra	11 0 0	8 0 0
Elph. Circle do. ...	do.	do.		6 0 0
Naigam Tank ...	Right of rearing fishes and cultivating vegetables.	Mungroo Jugga ...	115 0 0	60 0 0
			496 0 0	172 0 0"

No. 654. *Resolved*: "That the following be referred to the Commissioner for remarks and that the applicants be informed accordingly:—Memorandum from the Municipal Secretary, forwarding petition, dated 6th ultimo, addressed to the Corporation from H. H. Aga Khan, Sir Jamsetjee Jejeebhoy and others, on the subject of widening Matharpacady Road."

No. 655. *Resolved*: "That, with reference to their resolution No. 598, dated 17th instant, the Corporation be recommended to sanction the expenditure of Rs. 655 for the cost of the case and of clock for the Council Hall and the amount of Mr. Stevens' fee for design of the same. The cost to be met from savings in the grant for office furniture."

No. 656. *Resolved*: "That the following be *recorded*:—Resolution of the Corporation, No. 607, dated 17th instant, as under:—'That the Standing Committee

be informed, with reference to their resolution No. 13696, dated 22nd March 1893, that the Commissioner will, if he thinks it necessary, forward his memorandum No. 27318, dated 14th March last, to the Corporation direct.' "

No. 657. *Resolved*: "That three months' privilege leave be granted to Mr. H. W. Barrow, Municipal Secretary, from 6th proximo or such date as he may wish to avail himself thereof.

"That Mr. J. Leask be appointed acting Municipal Secretary during the absence of Mr. Barrow.

"That the Corporation be recommended to sanction an allowance of Rs. 100 a month to Mr. Leask whilst holding the acting appointment.

"The charge to be met from surplus cash balance."

The following return was read and *recorded* :—

No. 658. Return of fires at Dongri Street, Ripon Road, Kazi Street, and Bellasis Road Bridge, forwarded with the Commissioner's memorandum No. 1023, dated 17th April 1893.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 16th April 1893.

No. 659. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 1206, dated this day, sanction be given to the variation of the staff budgetted for at page 78 of the Budget Estimates for 1893-94, for the supervision of the construction of Fire Brigade Stations, so as to allow of the following appointments:—

As sanctioned in the Budget for 1893-94.				As proposed.			
Designation.	Salary.			Designation.	Salary.		
	Rs.	a.	p.		Rs.	a.	p.
1 Inspector and Surveyor ...	100	0	0	1 Inspector	100	0	0
2 Inspectors at Rs. 80 each ...	160	0	0	1 Do.	90	0	0
2 Do. at Rs 70 „ ...	140	0	0	1 Do.	80	0	0
3 Surveyors and Draftsmen at Rs. 50 each	150	0	0	1 Surveyor	60	0	0
				1 Do.	40	0	0
1 Clerk	45	0	0	1 Clerk	75	0	0
1 Do.	35	0	0	2 Clerks at Rs.30 each.	60	0	0
2 Peons at Rs. 10 each	20	0	0	3 Lascars at Rs.10...	30	0	0
2 Do. at Rs. 9 „	18	0	0				
9 Lascars at Rs. 10 „	90	0	0	7 Do. do. ...	70	0	0
				5 Maistries—salaries to be fixed by the Executive Engineer, the total not exceeding..	150	0	0
Total Rs. ...	758	0	0	Total Rs. ...	755	0	0

* See Appendix C. † See Appendix B.

Read letter No. 1247, dated 19th instant, from the Commissioner to the Secretary, as under :—

SIR,—Referring to this office No. 27318, dated the 16th ultimo, I have the honour to report that the total estimated cost of constructing the collecting night-soil depôt referred to therein will be Rs. 1,247 (Rs. 650 for the corrugated iron shed without roof, Rs. 355 for foundation, &c., and Rs. 242 for laying down Indian Patent Stone within the shed 2″ thick and ridged), and request the favour of the sanction of the Standing Committee and Corporation to the same being met from surplus cash balance.

2. The amount of Rs. 40,963-5-5 reserved for probable extra grants between January and March 1893 has already been fully appropriated, but a surplus of about Rs. 4½ lakhs has accrued since the publication of the revised estimates.

3. I further beg to report for the information of the Standing Committee as required by section 69 (*d*) of the Municipal Act that the work of constructing the shed has been entrusted to Messrs. Gahagan & Co. for Rs. 650.—I have, &c., H. A. ACWORTH, Commissioner.

No. 660. *Resolved* : " That letter No. 1247, dated this day, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to the payment of Rs. 1,247 to meet the cost of constructing the collecting night-soil depôt at Colaba therein referred to. The charge to be debited to the surplus of about Rs. 4½ lakhs on current revenue for the past year, which have accrued since the publication of the revised estimates for 1892-93.

" That paragraph 3 of the said letter reporting that the construction of the shed has been entrusted to Messrs. Gahagan & Co. for Rs. 650 be *recorded*."

No. 661. *Resolved*: " That, as applied for by the Commissioner, in his letter No. 1240, dated this day, and with reference to the Standing Committee's resolution No. 2964, of 29th June 1892, sanction be given to the payment, during the current year as occasion arises from time to time, of overtime wages to certain workmen of the Municipal workshops, labour staff and Water Works Department, at the rates hitherto paid. The cost to be debited to Municipal Workshops, labour grant and to Water Works Establishment, section 1, maintenance, Engineer's Budget."

No. 662. The Commissioner handed in the following papers relating to the question of Mr. R. G. Walton's pension, and it was agreed that the same be *recorded* :—

BOMBAY, 17*th April* 1893.

To H. A. ACWORTH, Esq.,
Municipal Commissioner.

SIR,—With reference to recent interview which Mr. Crawford had with you when you desired us to take Counsel's opinion on the

question of the Pension Regulations as bearing upon Mr. Walton's case, we have the honor to forward herewith copy of a case which we submitted to Mr. Inverarity and of his opinion, from which you will observe that he agrees with us in thinking that retrospective effect cannot be given to the new regulations and that any special regulation of the kind proposed would be *ultra vires*, but that he does not see any reason why the Municipality should not allow Mr. Walton to withdraw his resignation and cancel their acceptance of it, so as to enable him now to elect under the new rules and obtain his pension under them.—We have,&c., CRAWFORD, BURDER & Co.

1. I am of opinion that, as matters stand, Mr. Walton has no legal right to pension under the new rules. Nor do I think that the Municipality can give retrospective effect to those rules or have any power to frame a rule to give the benefit of the new rules to Mr. Walton.

2. I think it would be *ultra vires*.

3. I don't see any reason why the Municipality should not allow Mr. Walton to withdraw his resignation of his position as a Municipal servant and cancel their acceptance of it. Mr. Walton would then be able to elect under the new rules and send in his resignation.

It may be worth while to look at Mr. Walton's letter of resignation and see if it is a resignation of his post of Executive Engineer or of his post as a Municipal servant. If the latter, it might, by consent of the Corporation, be treated as a resignation of the post of Executive Engineer and withdrawn as to the latter.

If this is not done, I see no way of giving Mr. Walton the benefit of the new pension rules short of an Act of the legislature empowering the Corporation to give retired servants increased pensions.

April 17th, 1893.

1. Whether under the circumstances stated Mr. Walton's pension rights must be governed by the old rules or by the new regulations and whether the latter are capable of retrospective application?

2. Whether such a special regulation as has been suggested (*see* annexed draft) would, if framed by the Standing Committee and duly confirmed, be *intra vires* and valid?

3. If not, whether Counsel can suggest any other means by which Mr. Walton can now be legally placed upon the same footing as regards pension as if he had remained in the Municipal service until the new regulations came in force and to advise generally?

J. D. INVERARITY.

No. 1134 OF *18th April* 1893.

Returned.—I should like it to be explained how Mr. Walton's resignation can be allowed to date after 20th March (date of confirmation of Pension Rules) when Mr. Murzban had been duly appointed Executive Engineer, had retired from Government service on the strength of such appointment and had taken charge of the office on 25th January 1893.—H. A. ACWORTH, Commissioner.

18th April 1893.

H. A. ACWORTH, Esq.,
Municipal Commissioner.

SIR,—With reference to your No. 1134, dated this day (herewith returned), we have the honour to state that we understand Mr. Inverarity's suggestion in reply to query 3 of the accompanying case to be that Mr. Walton's resignation might be treated as a resignation merely of his post of Executive Engineer, but that he might be treated as continuing in municipal service without pay until such time as a fresh application can be received for permission to retire from that service under the new regulations; in other words, if (as presumably was the case) Mr. Walton's resignation was in terms a resignation of his position as a Municipal servant, then that such resignation and its acceptance might respectively, by consent of the Corporation, be allowed to be withdrawn and treated as cancelled *except* in so far as the resignation of the appointment of Executive Engineer is concerned and that Mr. Walton might be permitted to send in a fresh application to retire from municipal service.

This would, of course, be at the best only a device by which it might be legally possible for the Corporation (if under the circumstances they desire to do so) to enable Mr. Walton to have the benefit of the new pension regulations.—We have, &c., CRAWFORD, BURDER & Co.

With the assent of the Committee, it was agreed that the Hon'ble Mr. Fazulbhoy Visram be permitted to move a resolution, of which he had not given notice regarding the new Municipal Loan.

Proposed by the Hon'ble Mr. Fazulbhoy Visram, seconded by Grattan Geary, Esq.—

No. 663. "That the date for the submission of tenders for the new Municipal 4 per cent. Loan of Rs. 42,00,000, be extended from 25th instant to 10th June next."

The motion was *carried* by 6 votes *against* 3 votes.

BOMBAY, *26th April* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; K. M. SHORFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 19th instant, were signed.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Dadabhai Hormasjee & Co. for the supply of one thousand tons of Powell's Duffryn Cardiff coal, at the Love Grove Pumping Station ; and (2) with Mr. Lakshmidas Shamji for the construction of a manual engine Fire Brigade Station at Bhuleshwar Road.

The seal was also affixed to deed of agreement with Bai Jeenabai, widow of Nagu Patel, in respect of Municipal land at Parel, leased by her.

The seal was also affixed to deed of agreement (in duplicate) between Mr. Ebrahim Noordin and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property in Bora Masjid Lane in Shaik Memon Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 75 per square yard for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition.

The seal was also affixed, (1) to 2 attested duplicate debentures, Nos. 3735 and 3995 of the Tansa Water Works Loan of Rs. 500 each ; and (2) to 32 consolidated debentures, Nos. 147-156 (Rs.5,000), Nos. 412-15 (Rs 2,000),Nos. 801-10 (Rs. 5,000), Nos. 811-20 (Rs. 5,000), Nos. 821-30 (Rs. 5,000), Nos. 2005-24 (Rs. 10,000), Nos. 2025-44 (Rs. 10,000), Nos. 2045-64 (Rs. 10,000), Nos. 2065-84 (Rs. 10,000), Nos. 2125-44 (Rs. 10,000), Nos. 2085-104 (Rs. 10,000), Nos. 2105-24 (Rs. 10,000), Nos. 3631-40 (Rs. 5,000), Nos. 3641-50 (Rs. 5,000), Nos. 3651-60

(Rs. 5,000), Nos. 3661-70 (Rs. 5,000), Nos. 3671-80 (Rs. 5,000), Nos. 3681-90 (Rs. 5,000), Nos. 3691-700 (Rs. 5,000), Nos. 3701-4 (Rs. 2,000), Nos. 3725-34 (Rs. 5,000), Nos. 3797-816 (Rs. 10,000), Nos. 3817-36 (Rs. 10,000), Nos. 3971-80 (Rs. 5,000), Nos. 3981-90 (Rs. 5,000), Nos. 3991-92 (Rs. 1,000), Nos. 3993-94 (Rs. 1,000), Nos. 4032-33 (Rs. 1,000), Nos. 4028-31 (Rs. 2,000), Nos. 4034-5 (Rs. 1,000), Nos. 4794-5 (Rs. 1,000), Nos. 4796-99 (Rs. 2,000), of the Tansa Water Works Loan.

No. 733. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 1730, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Read letter No. 1597, dated 24th instant, from the Commissioner to the Secretary, as under :—

SIR,—Since the new Municipal Offices have been occupied, a considerable number of petty thefts has occurred, and my attention has also been pressingly drawn to the intrusion into the building without check or control of people—men, women and boys—who have no business there but walk in and stroll about to gratify idle curiosity. There also appear to be no sufficient means of protecting the building at night, which it is very necessary there should be, as the verandahs on the ground floor are all accessible and all contain valuable fire fittings and other articles open to removal by thieves. It is absolutely necessary that during the day there should be porters or janitors at the three principal entrances, and that there should be a proper provision of night watchmen on all three sides of the building at night. As valuable property is at stake, and the circumstances did not admit of delay, I have, in anticipation of sanction, directed the entertainment of the following establishment:—

For day duty—

3	Janitors on Rs. 12 each	Rs. 36

For night duty—

2	Naiks on Rs. 11 each	Rs. 22
4	Night peons on Rs. 9 each	„ 36

Rs. 94 per mensem,

or Rs. 1,128 per annum or for 11 months from April 1893 to February 1894, Rs. 1,034.

The cost of the clothing with which it is necessary they should be provided is Rs. 180, making a total charge of Rs. 1,034 + 180 or Rs. 1,214 for the current year. The amount can be met out of

surplus cash balance. A surplus cash balance of about 4½ lakhs has accrued since the revised estimates for 1892-93 were published. I have the honor to request sanction to this arrangement. The establishment will in future be added in the Budget.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by E. B. Carroll, Esq., seconded by R. G. Oxenham, Esq.—

No. 734. "That letter No. 1597, dated 24th instant, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to the employment of the following staff for the protection of the new Municipal Office and its contents, *viz.* :—

For day duty—3 Janitors on Rs. 12 each, Rs. 36. *For night duty*—2 Naiks on Rs. 11 each, Rs. 22; 4 Night peons on Rs. 9 each, Rs. 36. Total Rs. 94 per mensem. For 11 Months Rs. 1,034 *plus* cost of clothing Rs. 180. Total Rs. 1,214.

"The amount to be met from the surplus of about Rs. 4½ lakhs, which have accrued on current revenue since the publication of the revised estimates for 1892-93."

Amendment moved by A. G. Viegas, Esq., seconded by Bhalchandra K. Bhatwadekar, Esq.—

"That the three janitors be omitted from the list."

The *amendment* was *lost*, and the original motion was *carried* by 6 votes *against* 2 votes.

Read letter No. 1614, dated 24th instant, from the Commissioner, to the Secretary, as under:—

SIR,—I have the honor to state that the work of covering the floor of the distributing basin of the Bhandarwada Reservoir with Indian patent stone, of plastering a portion of the brick piers in that basin up to 5′ 6″ height, and of filleting the junction of main walls and piers with the floor (sanctioned by the Corporation in their resolution No. 5140 of 18th August 1892 at a cost Rs. 37,367) has been completed at a cost of Rs. 34,726 and the basin tested to determine the leakage. The test shows that the work done has been very successful and that the basin is now in a satisfactory condition, subject to the exceptions noted below.

It will be remembered that in 1891 when the filter-beds were repaired and the leakage from them stopped, the leakage was found to be 350,000 gallons per day. It was then decided to repoint with Indian patent stone the inner faces of the outer walls of the distributing basin. When this work was completed in the early part of 1892, the leakage was reduced by about 90,000 gallons daily, leaving about 250,000 gallons, and to stop this leakage the work above referred to was undertaken. Before the floor and piers were treated with Indian patent stone, the basin lost 5 inches in depth per day, at from 8 to 10 ft. in depth, but its gross loss now is only $\frac{3}{4}$ of an inch, and $\frac{1}{3}$ of this is due to the ascertained leakage from the 24″ sludge-valve and about $\frac{1}{12}$ of an inch to evaporation from the surface of the water, leaving the loss from the floor and walls only about $\frac{2}{3}$ of an inch per day.

It has now been ascertained that the basin still leaks when there is over 13 ft. of water in it, and that this leakage is from the unrepaired walls and the unprotected arches, as the piers and arches over 5′ 6″ in height are in their original condition.

The estimated cost of repointing with Indian patent stone the remaining portions (3,300 square feet) of the inner faces of the outer walls of the basin is Rs. 1,490, and of plastering 16,000 square feet of arches is Rs. 5,800. This estimate does not provide for plastering all the arches, but such portions only as are in contact with the outer walls. It may be eventually necessary to plaster the whole, but the Engineer recommends that the expense be avoided until the necessity for it has been proved.

Under the circumstances I request the Standing Committee to recommend the Corporation to sanction the expenditure of Rs. 7,290 from surplus cash balance to meet the cost of the proposed work.

The amount of Rs. 40,963-5-5 reserved for probable extra grants up to the end of March 1893, has been fully appropriated, but a surplus of about 4½ lakhs has accrued since the publication of the revised estimates for 1892-93.

There is a saving of Rs. 2,641 in the grant of Rs. 37,367 above referred to, but it has lapsed and now forms part of the surplus above mentioned.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner, in his letter No. 1614, dated 24th instant, the Corporation be recommended to sanction the expenditure of Rs. 7,290 to meet the cost of repointing with Indian patent stone the remaining portions (3,300 sq. feet) of the inner faces of the outer walls of the Bhandarwada Reservoir distributing basin, and of plastering 16,000 sq. feet of arches so as to avoid further leakage from the reservoir. The cost to be met from the surplus of about Rs. 4½ lakhs, which have accrued on current revenue since the publication of the revised estimates for 1892-93."

No. 735.

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 1274, dated 19th instant, sanction be given to the acceptance by him of the tender of Messrs. Heptoola Sheik Adam & Co., the only one received, for the supply of 2,000 cases of kerosine oil of the 'Snow Flake' brand of 150 degrees proof test, each case to contain 63½ to 64 lbs. net of oil, at Rs. 3-13-3 per case. The amount to be met from the budget grant of Rs. 30,000 for kerosine oil lighting."

No. 736.

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 1405, dated 21st instant, sanction be given to the payment of Rs. 7-8-0 to Bapujee Burjorjee, Fitter, Love Grove Pumping Station, being the amount of full pay for six days while he was under treatment at the hospital for injuries sustained to his eye, while removing the 'traveller' of the Station. The charge to be debited to the work in the execution of which he was injured."

No. 737.

Resolved : "That, as applied for by the Commissioner, in his letter No. 1584, dated 24th instant, sanction be given to the employment of one assistant lineman for the Water Works Department for the period of 12 days. The charge, Rs. 3-13-11, to be met out of savings (about Rs. 300) in the water works labour grant."

No. 738.

Resolved : "That, as applied for by the Commissioner, in his letter No. 1345, dated 20th instant, sanction be given to the purchase from Messrs. Merryweather & Sons, Longacre, London, of 75-100 feet lengths of 2½" diameter 'dub sub' hand-woven canvas

No. 739.

delivery hose, with gun-metal instantaneous couplings bound in with copper wire, leather guards and straps, for the Fire Brigade. The amount to be met from the grant of Rs. 9,000 sanctioned for the same by the Corporation in their resolution No. 211, dated 6th idem."

No. 740. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1432, dated 21st instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed against Nawab Kamal Khan Bahadur for the recovery of property taxes, A ward, Nos. 382 and 383 (1), and B ward, No. 5174-75, as per list submitted with the above letter."

No. 741. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1581, dated 24th instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Surgeon-Capt. J. P. Barry for the recovery of the tax on animals due by him as per list submitted, amounting to Rs. 22-11-0."

In accordance with notice, it was proposed by A. G. Viegas, Esq.—

No. 742. "That the attention of the Municipal Commissioner be drawn to the inadequate watering of roads and streets on the Port Trust Estate, Mandvi Ward."

The motion was seconded by Grattan Geary, Esq., and *Carried.*

No. 743. *Resolved* : "That the following be *recorded* :—Letter No. 1580, dated 24th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 651, dated 19th idem, that Mr. Morar Purshotum who has hired the upper floors of Municipal house at Bhuleshwar, now declines to pay the Municipal taxes. Stating that the tax will be paid out of the rent recovered from him."

On the application of the Commissioner, the consideration of the following was postponed till next week :—Memorandum No. 1406, dated 21st instant, from the Commissioner, requesting sanction, under section 240 of the

Municipal Act, to Mr. H. D. Padamji being allowed to lay a 6″ pipe drain embedded in concrete for the drainage of his bungalow No. 169, situate at Khetwadi Main Road.

Resolved : "That letter No. 187, dated 17th instant, from the Chief Accountant to the Commissioner, and accompaniments thereto, forwarded to the Secretary under the Commissioner's memorandum No. 1208 of the 19th idem, be *recorded* on the minutes of this day's meeting."

No. 744.

SIR,—I have the honor to forward for transmission to the Standing Committee a return for the quarter ending 30th March 1893, contrasted with the corresponding quarter for the previous year as required by the then Town Council's resolution No. 465 of 1st June 1887, with a list of additional grants sanctioned by the Corporation during the quarter.

2. In addition to the probable amount of surplus cash balance reported upon in paras. 2, 3 and 4 of this office No. 3436 of the 13th January 1893, a further surplus of about 4½ lakhs in revenue and a large saving in expenditure has accrued as far as can be ascertained from the latest actuals.

3. The exact balance of the unappropriated surplus cash balance on the 31st March 1893 cannot, however, be stated with precision unless the accounts for the year 1892-93 are finally closed. —I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

ACCOUNT OF THE BOMBAY MUNICIPALITY
as contrasted with that for the Quarter

	Budget Estimate.	Quarter ending 31st March 1892.	Quarter ending 30th March 1893.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Opening Balance	16,00,000 0 0	48,328 9 7	15,771 10 7
General Tax	18,48,758 0 0	5,33,735 2 4	2,87,127 1 4
Water Works Revenue (including Water Tax) ...	12,61,300 0 0	3,55,887 1 10	3,50,883 2 8
Wheel Tax and Tolls ...	3,16,312 0 0	1,74,678 13 9	1,86,652 5 4
Halalkhor Tax	5,53,000 0 0	1,34,677 12 8	1,19,054 4 10
Duties, Town...	9,00,000 0 0	2,49,837 5 1	3,44,429 13 2
Licenses	70,750 0 0	23,873 12 0	27,929 15 0
Receipts from Govt. for Liquor Licenses.	1,43,750 0 0	.....	.....
,, for Tobacco Duty.	1,80,000 0 0	61,791 0 0	63,880 1 1
Market Receipts	3,33,500 0 0	92,667 11 2	79,370 6 7
Miscellaneous Fees	46,500 0 0	12,883 9 4	8,346 14 10
,, Fines and Penalties...	7,000 0 0	4,489 5 1	3,916 4 0
,, Receipts ...	1,08,357 0 0	37,653 6 9	38,561 14 6
,, Savings ...	2,000 0 0	.....	.....
Public Gardens	6,290 0 0	2,301 9 10	2,286 1 6
Contribution from Municipal servants towards Pension, &c., Fund	15,000 0 0	3,986 6 6	4,343 12 0
Tramway Rent	36,200 0 0	.....	.....
Interest and Profit on Investments	1,21,600 0 0	1,26,418 9 3	79,232 0 7
	59,50,317 0 0	18,14,881 9 7	15,95,014 1 5
Debt	.....	33,04,000 0 0	.....
Bank of Bombay Loan and other Deposit Accounts ...	.....	18,78,544 6 5	34,43,522 11 10
Workshop Recoveries ...	.....	30,863 10 10	35,681 3 3
Advances	.....	3,92,659 2 4	1,22,600 10 7
Deposits	.....	2,06,170 4 9	1,80,896 10 4
Rupees ...	59,50,317 0 0	76,27,119 1 11	53,77,715 5 5
Total Rupees...	75,50,317 0 0	76,75,447 11 6	62,93,487 0 0

FOR THE QUARTER ENDING 30TH MARCH 1893
ending 31ST MARCH 1892.

	Budget Estimate.	Quarter ending 31st March 1892.	Quarter ending 30th March 1893.
DISBURSEMENTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Superintendence	1,90,436 0 0	40,043 4 4	57,973 0 8
Assessment and Collection Department	2,53,996 0 0	72,192 2 5	75,201 12 0
Fire Brigade	1,37,930 0 0	20,586 7 6	46,868 4 11
Public Gardens	82,297 0 0	34,169 9 10	27,517 0 10
Public Works (Engineer's) Dept. — General Supervision Estt.	41,060 0 0	9,351 7 9	8,919 10 10
Public Works (Engineer's) Dept. — Drainage	1,93,429 0 0	43,599 4 8	48,796 10 1
Public Works (Engineer's) Dept. — Water Works	2,97,010 0 0	† 7,96,311 2 3	64,658 2 6
Public Works (Engineer's) Dept. — Streets and Buildings Inspection and Supervision Estt.	87,383 0 0	21,447 6 10	22,329 11 11
Public Works (Engineer's) Dept. — Public Lighting ...	3,34,379 0 0	75,462 10 8	70,592 4 10
Public Works (Engineer's) Dept. — Road Watering	82,137 0 0	35,369 15 9	25,061 13 3
Public Works (Engineer's) Dept. — Road Repairs and Maintenance	4,57,547 0 0	1,45,076 0 0	1,43,642 2 6
Public Works (Engineer's) Dept. — Street Improvements ...	1,05,000 0 0	42,023 4 4	6,258 14 9
Public Works (Engineer's) Dept. — Cleaning, Lighting and Repairing Port Trust Wharves	37,642 0 0	.....	.....
Health Department	14,21,313 0 0	4,09,959 13 5	3,89,121 4 9
Police Charges	4,00,000 0 0	64,571 5 9	1,69,630 14 9
Education	87,720 0 0	20,928 14 4	19,774 1 7
Hospitals	60,108 0 0	14,664 0 4	13,598 15 7
Miscellaneous	82,045 0 0	36,589 6 5	20,004 1 3
New Works and Reserve Funds	1,13,268 0 0	1,69,299 3 2	62,161 6 9
Debt (including Sinking Fund deposited with the Bank of Bombay)... ...	21,68,278 0 0	5,28,272 15 11	7,01,533 14 5
	66,32,978 0 0	25,88,918 7 8	19,73,644 4 2
Loan Works Accounts ...	.....	3,30,809 14 1	14,71,457 13 2
Bank of Bombay Loan and other Deposit Accounts ...	.....	41,43,421 11 3	17,54,050 12 5
Workshops	.....	29,096 15 3	25,941 15 9
Advances	.....	1,85,150 5 1	1,13,656 8 11
Deposits	.....	2,14,446 8 9	7,42,163 8 3
Rupees...	66,32,978 0 0	74,91,843 14 1	60,80,914 14 8
Closing Balance	.....	1,83,603 13 5	2,12,572 1 4
Estimated Balance on 31st March 1893...	9,17,339 0 0	.....	.....
Total Rupees...	75,50,317 0 0	76,75,447 11 6	62,93,487 0 0

† Includes a net sum of Rs. 7,43,596-14-8 paid to date on account of Tansa and other Water Works executed out of Loan Funds and investment of Surplus Tansa Loan and Interest Funds.

List of the additional Grants sanctioned by the Corporation for the Quarter ending 31st March 1893.

No.	Month and Date.	Particulars.	Amount. Rs. a. p.
11763	1893. February 6th ...	Grant of Rs. 1,739, from surplus cash balance, to provide for the balance of the charges already incurred and the probable charges to be incurred for printing work and shorthand-writer's fees in connection with the House Connection Committee's proceedings ...	1,739 0 0
11766	" " ...	Grant of Rs. 583, from surplus cash balance, to provide for the cost of printing memorial to the Secretary of State for India on the question of the proposed increase in the force of the Police and its cost	583 0 0
11999	" 9th ...	Grant of Rs. 6,000, from surplus cash balance, to meet excess in sec. 4, contingencies and stores, B maintenance of L. G. P. Station, Engineer's Budget, for the current year ...	6,000 0 0
12250	" 16th ...	Grant of Rs. 780, from surplus cash balance, to meet the cost of telephone communication for the southern sec. of Tansa Water Works, *viz.* from Kurla to the sluice house at Sion, and from Kurla to the clearing sluice above Vehar Lake	780 0 0
12693	.....	Grant of Rs. 20,532, from surplus cash balance, to meet the value of the reclaimed ground of the Tank at DeLisle and Arthur Roads transferred by the Tansa Dept. to the Engineer's Dept., to be debited to Water Works and Roads Depts. rateably according to the area occupied by each Dept. respectively ...	20,532 0 0
14402	March 9th ...	Grant of Rs. 4,106-3-11, from surplus cash balance, to meet the amount of Mr. W. C. Rowe's pension from 11th February 1892 to 28th February 1893	4,106 3 11
13131	" 6th ...	Grant of Rs. 1,250, from surplus cash balance, to meet the cost of shifting and relaying the water mains in connection with the construction of the Falkland Road overbridge being equally divided between the B. B. & C. I. Ry. Company and the Municipality as agreed by the Company	1,250 0 0
13619	" 16th ...	Grant of Rs. 200 per month from surplus cash balance to meet the salary of the appointment of an architectural surveyor	2,400 0 0
		Total. ...	37,390 3 11

Resolved : "That the following be *recorded* :—Memo-
No. 745. randum No. 1112, dated 18th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 5620, dated 9th January 1889, the following transfers from one invested fund to the other, *viz.*, (*a*) from the surplus cash deposit account to the 5 per cent. Municipal Loans Sinking Fund deposit account 5 per cent. Municipal debentures for Rs. 7,000 on 12th instant; (*b*) from the 5 per cent.

Municipal Loans Sinking Fund deposit account to the surplus cash deposit account (cash Rs. 7,000) on 14th idem."*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 23rd April 1893.

Read letter No. 1714, dated this day, from the Commissioner to the Secretary, as under :—

'SIR,—In the Loan Works Budget for the current year, page 76, the sum of Rs. 24,519 has been provided to be raised by loan for the construction of storm-water drains as under :—.

	Rs.
1. Storm-water drain in Dadar Road from the ward office to the Railway culverts on the south...	6,740
2. Storm-water drain with masonry water gullies in Sleater Road from Grant Road Station to Chikalwadi	6,320
3. Storm-water drain with masonry water gullies in Chikalwadi	2,972
4. Storm-water drain and water gullies about the crescent opposite the old Municipal office	2,298
5. Storm-water drain with water gullies in Clive Road Cross Lane	1,336
6. Storm-water drain in Dadar Road from the Police chowki to the Portuguese Church	4,853
Rs....	24.519

But as against this loan provision, the expenditure sanctioned at page 77 of the Budget to be incurred during the year is Rs. 20,125, the work marked 6 will have to be postponed till next year. It is not proposed to raise a loan this year until the autumn, but there is no reason why the works above referred to should not be proceeded with at once and the cost thereof debited to available loan or other funds. Owing to the absence of storm-water drains at the places above mentioned, numerous complaints were received during the last monsoon, and with a view to avoid inconvenience to the public this monsoon, I have given orders for the invitation of tenders in respect of the works marked 1 to 5, which ought to be begun as soon as possible, and I request the Standing Committee to recommend the Corporation to sanction, pending the raising of

* The Chief Accountant reports that the balance remaining to the credit of the above accounts after effecting the above transfers are as under :—

(*a*)	In 5 per cent. Municipal Debentures	Rs.	28,85,060	0 0
	In 4 do. do. do.	,,	27,000	0 0
	In 4 do. Government Paper Rs. 4,33,000	,,	4,31,700	0 0
	In Cash	,,	69,833	12 0
		Rs.	28,53,534	1 0
(*b*)	In 5 per cent. Municipal Debentures for	,,	6,20,500	0 0
	In Cash	,,	320	11 0
		Rs.	6,20,820	11 0

† *See* Appendix B.

loan, an advance of Rs. 20,125 from available loan or other funds to be hereafter adjusted against the loan when raised.—I have, &c., H. A. ACWORTH, Commissioner.

No. 746. *Resolved*: "That letter No. 1714, dated this day, from the Commissioner to the Secretary, be forwarded to the Corporation with a recommendation that sanction be given to the payment of an advance of Rs. 20,125 from available balances of loans or other funds, to provide for the construction of storm-water drains in Dadar Road, Sleater Road, Chikalwadi, space facing the old Municipal Office, Clive Road cross lanes, provided in the Loan Works Budget for the current year (page 77 under the head of storm-water drains). The amount to be adjusted against loan to be raised hereafter."

No. 747. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1715, dated this day, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with the Indian Garlick Patent Stone Company for the supply of cement, whereby the contract time shall be extended to the 8th instant, and the penalty clause be waived, as no inconvenience or extra cost was caused to the Municipality by the delay in the delivery of the cement."

BOMBAY, 3*rd May* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; K. M. SHROFF, Esq. ; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; the ASSISTANT HEALTH OFFICER; and the SECRETARY.

The minutes of the meeting held on the 26th ultimo were signed.

The seal of the Corporation was affixed to deeds of contracts (1) with Garlick's Indian Patent Stone Company for paving the new Mutton Market at Arthur Crawford Market and Market at Foras Road ; and (2) with Mr. Byramji Jehangir & Co. for the supply of 100 wooden tree guards ; and (3) with Mr. Muncherji Kavasji Gazdar for annual repairs, petty works and supply of labour and materials during the year 1893-94.

The seal was also affixed to 14 attested duplicate debentures of the Water Works and Drainage Loan, Nos. 2097-2110 of Rs. 500 each.

No. 1013. *Resolved* : "That, as applied for by the Commissioner, in his memoranda Nos. 1877 to 1880, dated 28th ultimo, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Name of Owner.	Where.
Mr. Moosa Ibrahim... ...	... Building at New Parbhadevi Road.
„ Raghunath Damulji ...	... " Do. at Matunga Road.
„ Shewgopal Bendrawun	... Do. at Khetwady 1st Lane.
„ Nandoo Damodhar ...	... Do. at No. 263, Bazaar Gate Street."

No. 1014. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 2280, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 1015. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1921, dated 28th ultimo, the Corporation be recommended to sanction an advance of Rs. 15,802 out of surplus cash balance for the purchase of the following stoneware pipes in order to keep the stock of pipes in the Drainage Depôts up to its normal quantity, *viz.* :—

1,000	12" Stoneware	plain pipes	2 feet.
4,000	9"	do.	do.
1,000	9"	do.	2½ do.
36	12"×9"	do.	T Junctions.
74	9"×9"	do.	do.
24	12"	do.	flaptraps.
998	9"	do.	3 feet.
1,000	4"	do.	bends.

The advance to be adjusted against sanctioned grants for the works on which the pipes are used or against sale-proceeds.

No. 1016. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1902, dated 28th ultimo, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed against Memon Abdul Sakur Abdul Latiff for the recovery of wheel-tax bills amounting to Rs. 77, including notice fees."

No. 1017. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 1889, dated 29th ultimo, sanction be given to the payment of Rs. 1,650 to Messrs. Dinsha Nowroji Bode and Darashah

Nowroji Bode, trustees of the estate of Mr. Hormasji Dorabji Bode, in full satisfaction of all claims, including interest, in respect of 44·17 square yards, or thereabout, of ground acquired from such estate at 113, New Hanuman Lane."

No. 1018. In accordance with notice, it was proposed by A. G. Viegas, Esq.—

"That the Municipal Commissioner be requested to direct that all dust-bins in the city be daily emptied and liberally treated with disinfectants, and further that they be thoroughly washed and cleansed as frequently as possible."

Mr. Roughton raised the point that this proposal was out of order as the Standing Committee are not authorized to interfere with the executive work of the Commissioner.

The Chairman ruled that the proposal was out of order.*

Considered the following :—

No. 1977 OF 1893-94.

BOMBAY, 29*th April* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—The Managing Director, Bombay Tramway Company, has represented to me that the Company annually incur an expenditure of Rs. 2,734 in the removal of the stable manure from their Colaba and Parel Stables to the Flats, and that in consideration of the extra labour undertaken by them, some concession should be made to them in regard to the halalkhor tax.

Under Section 368 (1) of the Municipal Act, the Company is expected to deposit the refuse only at such places as are provided by the Commissioner for the *temporary* deposit thereof, and under Section 365 the Municipality has to get it removed to the place of final disposal at its own cost. To do this the Health Officer estimates that it would cost us Rs. 358 per month, or Rs. 4,296 annually, and moreover I am not certain that we would be easily able to find a suitable place for the temporary deposit of this enormous quantity of stable refuse without causing nuisance to the locality.

Under the circumstances, I think the proposal of the Managing Director is a reasonable one and to our advantage. I have the honour, therefore, to request the sanction of the Standing Committee to my entering into an agreement with the Company whereby, while they continue to be charged the halalkhor tax in respect of their stables and sheds (which we cannot legally forego), we shall pay back to them the precise amount of such tax as the amount

* In reference to this question the Commissioner said that, as a matter of courtesy to the Committee, he might mention that all the carts are emptied daily, the very great majority twice a day and some of them as often as five times a day, and that the carts are washed always once and the great majority twice a day.

agreed on in consideration of their continuing to do the work of removal of refuse to the place of final disposal. The Solicitors have advised me that this arrangement will be legal, and that, as we are legally liable for the removal of all the Tramway Company's refuse, it will cost greatly to our advantage.

The amount of halalkhor tax paid by the Company is Rs. 728-13-10 per annum.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 1019. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 1977, dated 28th ultimo, sanction be given to his entering into an agreement with the Bombay Tramway Company, whereby, while they continue to be charged the halalkhor tax in respect of their stables and sheds, the Municipality shall pay back to them the precise amount of such tax, *viz.*, Rs. 728-13-10 per annum, in consideration of their continuing to remove the refuse from the Colaba and Parel stables to the place of its final disposal."

No. 1020. *Resolved* : "That the following be *recorded* :—Letter No. 1923, dated 28th ultimo, from the Commissioner, reporting that he has sold the right of removing grass and fruit from mango and other injaili trees on the Tansa line between Valpada Overbridge and Bassein Creek No. 1—area about 20 acres—for one year ending 31st January 1894, to Mr. Abdula Mahomed Arab for Rs. 50.*

No. 1021. On the application of the Commissioner, the following item was struck out :—Memorandum No. 1406, dated 21st ultimo, from the Commissioner, requesting sanction, under section 240 of the Municipal Act, to Mr. H. D. Padamji being allowed to lay a 6" pipe drain embedded in concrete for the drainage of his bungalow No. 169, situate at Khetwadi Main Road.

Considered the following :—

To THE CHAIRMAN OF THE
STANDING COMMITTEE,
Bombay Municipal Corporation.

BOMBAY, 27*th April* 1893.

SIR,—We have the honor, on behalf of Mr. Ahamedbhoy Habibbhoy, to bring to your notice that the building for the deposit of night-soil, which is now being constructed at Colaba on the north

* This right was sold for the first time this year.

side of the new Apollo Press Company's press buildings (now his property) will encroach on the roadway leading to those buildings, thus preventing the passage of more than one cart at a time along that road.

This must cause a serious block in the cart traffic and loss to our client when merchants who now stow their cotton in the said press building find that there is delay in their bales reaching it and therefore discontinue storing their cotton there.

Further we are instructed to point out that the proposed night-soil building being in such close proximity to our client's property will prove to be a serious nuisance not only to the employés in the workshop (situated at a distance of only about 10 or 12 feet from it), but also to all who pass along to the press buildings. Our client's property will consequently be considerably damaged.

He hopes that the Standing Committee will take the above into their favorable consideration and direct the erection of the proposed night-soil building elsewhere.—We have, &c.,

BROWN & MOIR.

No. 1022. *Resolved*: "That, in reply to their letter, dated 29th ultimo, on behalf of Mr. Ahmedbhoy Habibbhoy regarding the erection of night-soil depôt at Colaba, Messrs. Brown and Moir be informed that the letter has been forwarded to the Municipal Commissioner."

The following statement * was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 30th April 1893.

BOMBAY, 10*th May* 1893.

AT the meeting of the Standing Committee held this day there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.

The EXECUTIVE ENGINEER; the DRAINAGE ENGINEER on special duty; the ASSISTANT WATER ENGINEER; and the ACTING SECRETARY.

The minutes of the meeting held on the 3rd instant were signed.

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* *See* Appendix **B**.

No. 1340. *Resolved* : "That the following be *recorded* :—Letter No. 1153, dated 6th instant, to the Chairman, from Messrs. H. W. Barrow and J. Leask, reporting that that day, after office hours, they respectively delivered over and received charge of the office of the Municipal Secretary."

No. 1341. The seal of the Corporation was affixed to power of attorney in favour of Superintendent Mr. Kaikhosru Pestonji Bhedwar to enable him to admit execution, before the Registrar, of deeds executed on behalf of the Corporation and requiring registration under the Indian Registration Act.

No. 1342. The seal was also affixed to deed of agreement between Mr. Gaspar Pascoal D'Souza and the Corporation, securing to the Municipality the right of setting back at any future time the house Nos. 67/69 and 420/422, situated at the junction of Dhuswadi and Lohar Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed.

It was agreed that the Commissioner be requested, before any similar sanction is applied for to the Standing Committee, to take the opinion of the Municipal Solicitors as to whether the Corporation will be in a position to enforce agreements of this character at the expiration of 12 years from the date of any such agreement.

No. 1343. The seal was also affixed (1) to deed of contract with Messrs. Hasanali Mulla Hakimjee & Brothers for the supply of petty stores, and (2) to ditto with ditto for the supply of hardware.

No. 1344. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 2129 and 2130, dated 2nd instant, sanction be given, under section 351 (2) of the Municipal Act to the removal of the following structures built without permission :—

Names of Owner.	Where.
Mr. Keshowjee Manek Vijkar...	Building at Telwadi in Vithalwadi.
„ Antonio Pascoal Luis ...	Do. at Mahim Bazar Road (Bhandarwada)."

Resolved : "That, as applied for by the Commissioner in his memorandum No. 2860, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 1345.

Resolved: "That, as applied for by the Commissioner in his memorandum No. 2665, dated 8th instant, sanction be given, under the pension rules, to the payment of compassionate allowance of Rs. 52-2-7 to the widow of Narayen Daji Kanade, late peon, Chief Accountant's Office.

No. 1346.

"The amount to be met from the grant for pensions and gratuities for the current year."

Read letter No. 2773, dated 9th instant, from the Commissioner, to the Secretary, as under :—

SIR,—In response to the advertisement calling for tenders for the supply of stoneware pipes for the Colaba Sewerage works two tenders have been received, *viz*.—(1). Messrs. Richardson & Cruddas, for the supply of stoneware pipes manufactured by Messrs. Doulton & Co., (2) Messrs. Warden & Co., for the supply of pipes manufactured by Messrs. J. C. Edwards & Co., at schedule rates aggregating Rs. 56,332 and Rs. 46,228, respectively. In the specification attached to the form of contract issued to the tenderers, it was stipulated that the pipes were to be of the best quality, of London-made, well burnt stoneware, of the pattern already in use by the Municipality and manufactured by one of the leading English manufacturers, and that no Scotch and no fireclay pipes would be accepted. Doulton's pipes have been used by us in all our works, but as nothing was known about the quality of Messrs. J. C. Edward & Co.'s pipes, Major Tulloch, R.E., was telegraphed to to ascertain their quality, and from his answer I find that they are neither stoneware nor London-made, but of fireclay and made in North Wales. Thus it will be seen that the tender of Messrs. Warden & Co. is not in accordance with the specification, which was for London-made stoneware pipes and not Welsh fireclay. Since the receipt of the tenders the Special Drainage Engineer has had an interview with Messrs. Richardson & Cruddas and induced them to reduce their rates by 5 per cent. for some of the articles. The revised tender amounts to Rs. 53,515, that is, less than the ori-

ginal tender by Rs. 2,817. Under the circumstances, I have the honour to request the approval of the Standing Committee to my accepting the tender of Messrs. Richardson & Cruddas for the supply of stoneware pipes at rates aggregating Rs. 53,515. The cost can be met out of the allotment for the Colaba Sewerage works.—I have, &c., H. A. ACWORTH, Commissioner.

No. 1347. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 2773, dated 9th instant, sanction be given to the acceptance by him of the tender of Messrs. Richardson & Cruddas for the supply of stoneware pipes for the Colaba sewerage at schedule rates aggregating Rs. 53,515. The amount to be met out of the allotment for the Colaba Sewerage works."

No. 1348. *Resolved* "That the following be *recorded* :—Letter No. 2531, dated 5th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 103, dated 5th ultimo, regarding the sale of right of cutting grass, &c., to Messrs. Rambhai Vithoba and Dhaku bin Mal Patel for Rs. 100 ; that the former party having failed to pay his share of the balance of the purchase money and the latter having paid the whole sum, the right has been sold to Dhaku bin Mal Patel alone."

Read letter No. 2401, dated 4th instant, from the Commissioner, to the Secretary, as under :—

SIR,—With reference to Standing Committee's resolution No. 741 of 26th ultimo, I have the honor to report that Surgeon-Captain J. P. Barry has sent me a cheque for Rs. 20, which he appeared to believe was the amount due. Rs. 2-11-0 have still to be recovered, and I have asked him to remit the amount. Dr. Barry appears to have withheld payment under a misapprehension as to his liability and not from any wish to evade a legal demand. I think it right to make this statement, as the case was reported in the newspapers. There will now of course be no need to take legal proceedings.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by Bhalchandra K. Bhatawadekar, Esq.—

No. 1349. "That the consideration of the Commissioner's letter No. 2401, dated 4th instant, be deferred till next meeting and the Commissioner requested to give further information as to the facts of the case."

The motion was seconded by E. B. Carroll, Esq., and *carried*.

Considered the following :—

Statement of Houses or portions of Houses which fell during the month of March 1893.

No.	Ward.	Street No.	Locality.	Names of Owners.	Description of *Building.*	Age of Building or date of erection (if known).	Date of *fall.*	Cause of fall.	Part fallen.	Casualties. Persons injured.	Casualties. Persons killed.	Estimated loss.	Whether or not action taken by the Municipality.	Whether or not warning given to the parties.	REMARKS
							1893					Rs.			
1	C	53	Charni Wadi	Dewji Walji... ...	House ...	Old ...	23rd March	While the owner was in act of pulling down.	A portion ...	Nil.	Nil.	10	Nil.	Nil.	

No. 1382 OF 1893-94.

BOMBAY, 27*th April* 1893.

Forwarded to the Municipal Commissioner.

M. C. MURZBAN,
Executive Engineer, Municipality.

No. 2128 OF 1893-94.

BOMBAY, 2*nd May* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

Resolved : "That the following be *recorded* :—Memo-
No. 1350. randum No. 2128, dated 2nd instant, from the Commissioner, forwarding statement of houses or portions of houses which fell during the month of March 1893."

Resolved : "That the following be laid on the table :—
No. 1351. Letter, dated 2nd instant, from Messrs. Ardaseer Framjee Moos and Nanabhai Rastamji Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of March last and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding a summary and statement of their scrutiny of accounts."

The following return was read and *recorded* :—

Return of fires at Duncan Road, Frere Road, Carnac
No. 1352. Road, Kolsa Street, Stable Street (Kamatipura) and Lower Colaba, forwarded with the Commissioner's memorandum No. 2059, dated 29th April 1893.*

(2) "That the Commissioner be requested to give fuller information under the heading 'cause of fire' in cases of spontaneous combustion."

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 7th May 1893.

Read letter No. 2780, dated 9th instant, from the Commissioner, to the Secretary, as under :—

SIR,—There is a provision of Rs. 9,270 in the current year's budget for the purchase of a stone-breaking machine, but as there is no information available as to the latest and most improved pattern of the machine to enable the Executive Engineer to call for

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* *See* Appendix C. † *See* Appendix B.

tenders, I have requested Major Tulloch, R.E., to purchase one of the latest patterns suitable for the purpose of breaking road metal at a cost not exceeding Rs. 9,000, delivered in Bombay. By this arrangement we shall be able to obtain the most improved machine and save the cost of printing contracts and advertising tenders.

I therefore request the Standing Committee to dispense with the invitation of tenders under Section 72 (3) of the Municipal Act.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That, as applied for by the Commissioner in his letter No. 2780, dated 9th instant, sanction be given to the purchase, through the agency of Major Tulloch, R.E., of a stone-breaking machine, including engine and fittings complete, of the latest pattern, at a cost not exceeding Rs. 9,000, delivered in Bombay. The amount to be met from the Budget grant of Rs. 9,270 for the same.

No. 1353.

" That, under the provisions of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as the purchase of the said machine through the agency of Major Tulloch would prove advantageous to the Municipality."

Read letter No. 2866, dated this day, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to request the approval of Standing Committee to my accepting the tender of Messrs. Spencer, Mistri, Bhedwar & Vachaghandy, the lowest of three tenders received, for the work of constructing storm water drains on Dadar Road, Sleater Road and in Chikalwadi, at schedule rates, aggregating Rs. 11,511-11-3. The cost will be met out of the Budget provision of Rs. 20,125.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by E. B. Carroll, Esq , seconded by Hurkisondas Nurotumdas, Esq.—

" That, as applied for by the Commissioner, in his letter No. 2866, dated this day and subject to the sanction of the Corporation being given to the advance of Rs. 20,125, as recommended in the resolution of the Committee No. 746, dated 26th April last, sanction be given to the acceptance by him of the tender of Messrs. Spencer, Mistri, Bhedwar & Vachaghandy, the lowest of the three tenders received, for the work of constructing storm-water drains on Dadar Road, Sleater Road and in Chikalwadi, at schedule rates, aggregating Rs. 11,511-11-3. The cost to be met from the Budget provision of Rs. 20,125 for the same."

No. 1354.

Carried.

BOMBAY, 17*th May* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*
E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; K. M. SHROFF, Esq.; KAIKHOSRO N. KABRAJI, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; A. G. VIEGAS, Esq., L.M.& S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the ACTING SECRETARY.

The minutes of the meeting held on the 10th instant, were signed.

The seal of the Corporation was affixed (1) to 7 attested duplicate debentures of the Municipal Loan of 1878, Nos. 1586, 1856, 1857 and 4057-60, of Rs. 500 each; (2) to 1 attested duplicate debenture of the Municipal Sanitary Works Loan of 1885, No. 32 J of Rs. 500; and (3) to 6 attested duplicate debentures of the Tansa Water Works Loan, Nos. 31, 778, 779, and 780, of Rs. 500 each, and Nos. 13215-16 and 13219-20, of Rs. 1,000 each.

No. 1561. *Resolved* : "That, as applied for by the Commissioner, in his memoranda No. 2977, dated 12th instant, and No. 3180, dated 16th idem, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owner.	Where.
Mr. Mahomedali Amin Saheb ...	Building at Malet Bunder Road.
Haji Ismail Gool Mahomed ...	Do. at Clerk Road."

No. 1562. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 3380, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Considered the following :—

No. 3201 OF 1893-94.

BOMBAY, 16*th May* 1893.

To THE MUNICIPAL SECRETARY.

SIR,—With reference to Standing Committee's Resolution No. 1349 of the 10th instant, requesting me to give further information as to the facts of the case dealt with in their Resolution No. 741 of 26th ultimo, sanctioning a suit for the recovery of taxes against Surgeon-Captain Barry, I have the honor respectfully to express the

opinion that it was unfortunate that the matter should have been discussed, as it was, in my absence, seeing that it was evident that further explanation from me would be required and the matter therefore would have to be adjourned. My letter No. 2401 of the 4th instant, in which I stated that Surgeon-Captain Barry appeared to have withheld payment under a misapprehension as to his liability, and not from any wish to evade a legal demand, and added that I thought it right to make this statement as the case had been reported in the newspapers, was intended to relieve the officer in question of any annoyance which the publication of his name might have entailed. As, however, the discussion in the Standing Committee on the 10th instant was very fully reported (though I understand not quite accurately), and as Surgeon-Captain Barry followed this up with a letter to the press in which he represents himself as a proper object of sympathy and charges me with treating him with want of consideration, I am driven to the troublesome and disagreeable necessity of making the whole of the facts public, which, for the gentleman's sake, I should have been very glad to avoid.

2. The bills for the recovery of which legal proceedings were sanctioned are for the four quarters of the year 1891-92. The Ward Officers of the Assessment Department in the course of their monthly inspection found in the stable of Surgeon-Captain Barry—

During quarter ending 30th June, one horse ;

During quarter ending 30th September, one four-wheeled carriage and two horses ;

During quarter ending 31st December, two horses, one four-wheeled carriage, and one pony ; and

During quarter ending 31st March, two horses, one four-wheeled carriage, and one pony up to 11th January 1892.

Of the two horses and one carriage found during the last three quarters, one horse and the carriage were hired from Messrs. Ludha Ibram & Co., and the tax leviable thereon was recovered from the latter. In order to determine whether Surgeon-Captain Barry was entitled to any exemption under section 181 (c) of the Municipal Act, the usual references were made to the Pay Examiner, Military Accounts Department, by the Assessor and Collector on 9th July, 28th August, and 8th October 1891 and 8th January 1892, and on the 17th July, 8th September, and 14th October 1891 and 19th January 1892 that officer reported that Surgeon-Captain Barry was in civil employ from the 1st of April 1891 and not paid in the Military Department. On the strength of this information, which is always obtained before bills are prepared or exemption allowed under section 181 (c), the officer in question was, as usual, held not to be exempt on account of any charger. Bills were accordingly prepared and issued on 29th September and 20th October 1891 and 28th January and 20th April 1892. The bill for Rs. 6 for the quarter ending 30th June issued on 29th September 1891 was presented to Surgeon-Captain Barry on 21st October 1891, and on the same day he wrote a pencil note to the Assessor saying "the mare

was his own charger," and he understood therefore that he was not called upon to pay the tax on it. In reply the Assessor informed him by his letter No. 21200 of 19th November 1891 that he was not entitled to a charger during the quarters ending 30th June and 30th September 1891 as he was not paid in the Military Department, being in Civil employ from 1st April ; and he requested him to pay the bill for the two quarters in question, amounting to a total of Rs. 12. The bills remained unpaid and the letter unanswered, and on the 15th December the Ward Superintendent reported to the Assessor that the Ward Clerk had called several times, but could not see the gentleman. The Assistant Assessor, in reply, directed that the Ward Clerk should try and see Surgeon-Captain Barry and that a further report should be submitted. On the 17th December the Ward Clerk reported to the Ward Superintendent that, on his presenting the bill for the quarter ending 30th June, Surgeon-Captain Barry retained it and did not return it, though requested either to do so or to pay. Thereupon the Assessor wrote, under his No. 24623 of 5th January, to Surgeon-Captain Barry informing him of what had been reported to him, and adding that as bills were vouchers for which Ward Clerks were held responsible, and as they had either to return them or pay the equivalent of the bills every evening, he requested that he would either return the bill or pay it to the bearer. The Assessor and Collector was informed by the Ward Superintendent, on 28th January, that the letter was delivered by the Ward Clerk, but no answer was given, and the gentleman was said to have gone to Bijapur the next day. The Assessor then wrote, under his No. 27536 of 5th February 1892, to Surgeon-Captain Barry at Bijapur, requesting remittance or the return of the bill with his reasons against paying it. No answer was received to this letter. On the 23rd April, the Assessor and Collector wrote again to Surgeon-Captain Barry at Bijapur, under his No. 1472, inviting his attention to his letter of 5th January and 5th February, and requesting payment of the bills amounting to Rs. 20 for the three quarters ending 31st December 1891, and reminding him that the bills were over-due. No answer was received. On 13th May 1892, the Assessor was informed that the bills were still unpaid. He then referred the matter to me, informing me that, though a letter and two reminders had been sent to Surgeon-Captain Barry, he had received neither reply nor remittance, and requested that I would address him. I thereupon wrote to Surgeon-Captain Barry my letter No. 4929 of 7th June giving him details of the outstanding bills, reminding him that they were unpaid, and requesting him to remit the amount. No answer was received. On 28th June I again addressed Surgeon-Captain Barry, under my letter No. 6780, informing him that a bill for Rs. 2-11-0 for quarter ending 31st March 1892 was also due, and requesting him to remit the amount. No answer was received to this letter. On 29th July I wrote again, under my letter No. 9522, inviting his attention to my previous communication and requesting an early remittance.

No answer was received to this letter. On the 12th September I addressed Surgeon-Captain Barry, under my letter No. 13057, again drawing his attention to my previous letters and informing him that, unless the amount of the bills was remitted or some explanation furnished, I should lay the matter before the Surgeon-General. This letter elicited an immediate reply, dated 14th September, which Surgeon-Captain Barry has already published in the press. In this he repeated his former contention, which had been replied to by the Assessor, that as a military officer he was exempted from the tax because, though acting in the Civil Department, he was still borne on the roll of his regiment and his charger was part of his equipment. The Assessor and Collector reported to me, in answer to this letter, that Surgeon-Captain Barry had been entered in the list returned by the Presidency Paymastor as not entitled to any exemption. I may here note that the words "Presidency Paymaster" were in mistake used for Pay Examiner, Military Accounts Department. I thereupon addressed to Surgeon-Captain Barry my letter No. 15921 of 19th October, in which I informed him that the Presidency Paymaster reported that he was not entitled to exemption and requested him to remit the amount, Rs. 22-11-0, at an early date. On the 10th November the Pay Examiner, Military Accounts Department, wrote to me as follows :—

"With reference to your letter No. 1592 of 19th ultimo to "Surgeon-Captain J. P. Barry, Acting Civil Surgeon, Bijapur, "I have the honour to request you will be so good as to furnish "me with a copy of the report in which the Presidency Pay- "master stated that Surgeon Barry is not entitled to exemption "from the tax on horse allowance while acting in civil employ."

I replied, under my No. 18342 of 24th idem, forwarding an extract from the list furnished to the Assessor and Collector, Municipal Taxes, and adding that it had been furnished by the Pay Examiner, and not by the Presidency Paymaster. Nothing further was heard either from the Pay Examiner or from Surgeon-Captain Barry. On the 2nd February 1893 I wrote again to Surgeon-Captain Barry drawing his attention to my letter of 19th October, and requesting him to remit the amount due without further delay. No reply was received. On the 19th April the Assessor and Collector informed me, in answer to an enquiry, that the bills had not yet been paid and suggested a reference to the Surgeon-General. I came to the conclusion, however, that as the bills had been outstanding for 15 months, some of them for nearly 2 years, and as out of eight letters written to Surgeon-Captain Barry one only was replied to by him, no further time ought to be lost and applied therefore to the Standing Committee for sanction to take legal proceedings.

3. It will have been observed from the above, in support of which I transmit the entire correspondence, that, besides numerous personal applications by the Ward Clerk, four letters from the Assessor

followed by two from myself were entirely ignored and that the only letter throughout the whole correspondence which elicited any reply was that in which I threatened a reference to the Surgeon-General. After Surgeon-Captain Barry's reply to the last letter I addressed two more letters to him, which were also ignored. I think that any impartial person will agree with me that, so far from Surgeon-Captain Barry not having received, to use his own words, "that consideration which ordinary people have a right to expect," he received much more consideration than either he or any one else had a right to expect, and that the remark which I made at the meeting of the Standing Committee on the 26th ultimo, which, I may add, was the only remark I did make, that "I could not get an answer out of him" was fully justified.

4. The proceedings of the Standing Committee of the 26th April, in which sanction to a suit was given, having appeared in the Press, Surgeon-Captain Barry immediately addressed me his letter of 1st May, which he has published. With this letter he sent me the correspondence between himself and the Presidency Paymaster, which he has also published. On being informed in my letter of 19th October that the Presidency Paymaster had reported that he was not entitled to exemption, he addressed that officer for verification or otherwise of the statement and was informed by the Presidency Paymaster that that officer was not aware of any correspondence having passed with the Municipality on the subject. As already noted in this letter, the words "Presidency Paymaster" were an error for Pay Examiner, Military Accounts, and on receipt of the letter from the Pay Examiner, which I have already quoted and which indicated that a reference had been made by Surgeon-Captain Barry, I assumed that the mistake would be cleared up by my answer. Whether it was or not I am not aware, but if it was not, I am unable to understand why Surgeon-Captain Barry did not, in answer to my letter of 29th October and my further letter of 2nd February, inform me that the Presidency Paymaster disclaimed all knowledge of the subject. The only conclusion to which it was possible for me to come in the face of Surgeon-Captain Barry's persistent silence was that it was futile to address any further communications to him.

5. I am not concerned to discuss Surgeon-Captain Barry's letter to the Press of the 11th instant; but when he says that under certain circumstances he "should have sent on the question of principle to be decided by higher authority," and speaks of his "right to have it settled on other grounds besides the bludgeon argument of the law courts," he forgets that there is no authority except the law court which can decide a question of law, and what he calls a question of principle is simply a question of law and nothing else. In warning him that I should make a reference to the Surgeon-General, I had not the intention of recovering the tax through the intervention of the latter, but of reporting Surgeon-Captain Barry for misconduct in neither liquidating the Municipal demands nor replying to the letters addressed to him. But, as I have already

stated, when the time came to take action, I considered that the great delay which had occurred imposed the obligation of immediately taking legal proceedings. I may, however, add, for the information of the Standing Committee, that in another case, in which the so-called principle was the same, though the circumstances as regards the officer concerned were far less aggravated, a reference was made by the Assessor and Collector to the Surgeon-General, who replied on 14th ultimo that the question was one for the Municipality. I need hardly add that neither the Standing Committee nor I have any power to remit or forego taxes legally recoverable, and that I should not have troubled the Standing Committee with this letter or with the correspondence herewith forwarded if questions had not been raised as to the equity of my action and that of the Standing Committee.—I have, &c.,

H. A. ACWORTH,
Commissioner.

Proposed by G. W. Roughton, seconded by Hurkisondas Nurrotamdas, Esq.—

No. 1563. "That letters No. 2401, dated 4th instant, and No. 3201, dated 16th idem, from the Commissioner, on the subject of the recovery of the tax on animals from Surgeon-Captain Barry be *recorded*, and that the Commissioner be requested to inform Surgeon-Captain J. P. Barry that if the balance of the tax still due be not paid forthwith, proceedings will be taken against him for its recovery."

Carried.

No. 1564. *Resolved*: "That the consideration of letter No. 3005, dated 12th instant, from the Commissioner, be deferred and that the Commissioner be requested to take Counsel's opinion as to whether the Fazindari owner of the land is an owner of the land within the meaning of the Municipal Act, and can be proceeded against for the recovery of taxes due by persons holding his land."

No. 1565. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 3081, dated 13th instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Messrs. Kavasji D. Rastomji, Kavasji P. Framji and Byramji N. Framji, trustees of the Parsi Fire Temple and its appurtenances, assessed under Ward Nos. 1 to 7, Thakordwar Road, for the recovery of property taxes and notice fees as per list submitted, amounting to Rs. 98-5-3."

No. 1566. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 3006, dated 12th instant, sanction be given, under section 185 of the Municipal Act, to his compounding with commission stable dealers as per the following statement for the payment during the current year, of lump sums, in lieu of the taxes which they would otherwise be liable to pay under section 180 of the Act.

"That any dealer having stables in which horses are kept for sale on commission, or otherwise, be charged in the same way on the principles laid down in the Commissioner's letter No. 17581, dated 15th November 1890, and as sanctioned by the Standing Committee's Resolution No. 8405, dated 19th idem.

No.	Ward.	Ward No.	Names of Stable-keepers.	No. of horses 1893-94.	Amount.			Remarks.
					Rs.	a.	p.	
1	E	3099-3112	Umar Jamal Vuyani ...	379	189	8	0	
2	E	3113-3130		238	119	0	0	
3	E	3229	Karimkhan Daryakhan ...	16	8	0	0	
4	E	3230	Gulam Nubi	16	8	0	0	
5	E	3265-81	Sheik Essa bin Khalifa ...	624	312	0	0	
6	E	3283-93	Do.	380	190	0	0	
7	E	3319 3321 ... ... 3325-3327	Abdul Vahad bin Ahmed Masari.	280	140	0	0	
8	E	3839-3842	Ali bin Amir	516	258	0	0	
9	E	3754 (2a), 3836 (1), 3837 (1)	Abdulla Ruzak bin Katras	75	37	8	0	

No. 1567. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 2818, dated 10th instant, the Corporation be recommended, with reference to their resolution No. 8418, dated 10th November last, to sanction the expenditure of Rs. 1,950, to meet the cost of erecting a small shed at Bandora, to stable the bullocks, as well as a small hut for the Halalkhor and cart-driver, in connection with the latrine erected there. The amount to be met from the sum of about Rs. 4½ lakhs which have accrued since the publication of the revised estimates for 1892-93."

No. 1568. *Resolved* : "That the follwing be *recorded* :—Letter No. 3022, dated 12th instant, from the Commissioner, reporting that he has sold the right of cutting grass, catching fish, &c., for 1893-94, as per following list:—

Comparative Statement shewing the annual amounts realized for the rights to cultivate, &c., certain Municipal lands and places in the charge of the Health Department for the years 1890-91, 1891-92, 1892-93 *and* 1893-94.

Property No.	Names of Lease-holders.	Description of Lands.	Areas of Land let.	For what purpose.	Amount realized in 1890-91.	Amount realized in 1891-92.	Amount realized in 1892-93.	Amount realized in 1893-94.	For which period.
					Rs. a. p.	Rs.	Rs.	Rs.	
1	Saggaji Ramji and Tukaram Daji.	Municipal reclaimed ground at Coorla except the land occupied by the Tansa Water Works.	Areas about 60	Cultivation ...	13,000 0 0	10,475	10,600	10,000	From 1st April 1893 to 31st March 1894.
2	Do. do. ...	Municipal reclaimed ground at Tardeo. Flats. Such portions of the Flats as are not required for the deposit of town sweepings.	Do. do. 70	Do. ...	16,525 0 0	12,025	15,200	9,500	
3	Do. do. ...	Municipal reclaimed ground at Sion ...	Do. do. 4½	Do. ...	970 0 0	625	705	650	
4	Do. do. ...	Portion of reclaimed ground at Dharavi Road, Mahim.	840 sq. yds.	Do. ...	200 0 0	325	325	350	
5	Balla Takooji	Ground at Clerke Road, north side ...	3,177 ,,	Do. ...	850 0 0	Not let.	520	715	
6	Rubhaji Ganooji ...	Warli Reclamation ground	About 1 acre.	Do. ...	.....	.....	70	140	
7	Waga Dooda	Ground, tank and water course on the west side of Arthur Road.	12½ ,,	Do. and cutting grass.	3,237 0 7	2,685	1,600	2,230	
8	Do.	Ground at Arthur Road and DeLisle Road adjoining the new Municipal Hospital and Sheep Market and portion of land on side of Chinchpokli drain, between DeLisle Road and G. I. P. Railway culvert.	14,735sq.yds.	Do. ...	1,125 0 0	700	755	970	
9	Mulloo Savanna and Kondaji Mahadoo.	Haine Road Burial ground	.....	Cutting grass and grazing cattle.	380 0 0	220	315	330	
10	Do. do. ...	Clerk Road Old Cemetery	.....	Do. ...	260 0 0	200	200	190	
11	Jao Antonio Patell ...	Water channel on Municipal ground at Coorla.	.....	Catching fish ...	40 0 0	40	60	20	
12	Jeewa Nusseer... ...	Kamathipura M. C. Stables	.....	Removing cow-dung.	250 0 0	200	170	305	
13	Shaik Chand	Agripada do, ,, ...	.....		100 0 0	85	75	95	
14	Jeewa Naseer	C Ward stable	.....		30 0 0	30	20	25	
15	Dewoo Harset	Sides of Elphinstone Road water channel.	.....	Cutting grass ...	.....	.....	10	10	
		Total Rupees... ...	.....	.....	36,967 0 7	27,610	30,625	25,530	

Resolved : "That, as applied for by the Commissioner in his letter No. 3178, dated 15th instant, sanction be given to the acceptance by him of the tender of Messrs. Bulkley & Co. for the work of earthwork, pipe sewers, manholes, automatic flushing tanks, and metal vent shafts in the Colaba sewerage district at schedule rates, aggregating Rs. 2,25,606·720."

No. 1569.

Resolved : "That, as applied for by the Commissioner in his letter No. 3181, dated 16th instant, sanction be given to the payment of Rs. 450 to Messrs. Harkisondas and Bhagwandas Narrotumdas as full compensation for the 177·39 square yards or thereabout of land required in connection with the new engine house at Love Grove. The amount to be met from the grant for the work."

No. 1570.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 3179, dated 16th instant, sanction be given, under section 381 of the Municipal Act, to a notice being served on Rao Saheb Gunpatrao Moroba Pitale, requiring him to clean out the well attached to his property No. 73, Moogbhat Lane, as the water of the well is foul and has been emitting an offensive smell."

No. 1571.

Considered the following :—

No. 2955 OF 1893-94.

BOMBAY, 11*th May* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—In their resolution No. 7844, dated 19th March 1890, the Standing Committee sanctioned the filing of a suit in the High Court against Haji Fateh Mahomed Rahimtula for the removal of encroachments made by him on Municipal land at Fergusson Road and on the Tulsi pipe line. The encroachments consisted of window shutters of three floors opening outwards over the Tulsi pipe line to the extent of 1′ 2″ and on eaves projection of 2′ 6″, the whole length of the chawl and of the erection of the front of the chawl on a strip of Municipal land 10 feet in width.

The High Court passed a decree in favour of the Municipality on 24th August 1892, wherein Haji Fateh Mahomed is perpetually restrained from trespassing on the plot of land referred to and on the Tulsi pipe line, and he is ordered to remove the building, window shutters, and eaves from on and over the said land and to pay the Municipality the costs of the suit.

It appears that shortly before the filing of the suit and at the time when he knew that steps were about to be taken against him in respect of the encroachments he mortgaged his property to Messrs. Kandas Brijvalabhdas, Keshew Dalal, Shivlal Sambhulal Khandvala and Tuljaram Gulabdas Khandvala, residents of Surat. These people were not aware of the encroachments when they advanced the money. But as soon as they heard of the decree, they communicated through their Solicitors, Messrs. Tyebji, Dayabhai and Jamshedji, with the Municipal Solicitors, and urged that inasmuch as they were not aware of the encroachments at the time when they made their advance upon the security of the property it would be rather hard upon them if the Municipality were to insist upon the removal of a considerable part of the chawl and that they might be allowed to purchase the piece of land built over. In reply to this they were informed by me that the Corporation would be recommended to sell the land encroached on at Fergusson Road at Rs. 3 per square yard and to allow all encroachments above 12′ from the ground to remain on sufferance, removable at a month's notice, on payment of a monthly rent of Re. 1, provided they pay our costs in full and remove all encroachments on the Tulsi pipe line below 12′ from the ground.

The bill of costs in the suit has been taxed and the amount allowed thereon as between party and party, that is, as payable by Haji Fateh Mahomed, is Rs. 1,693-5-0 and that allowed as between attorney and client is Rs. 713-3-0, which our Solicitors advise we cannot call upon the mortgagees to pay, for we could not under the decree recover them even from Haji Fateh Mahomed.

The mortgagees accept the terms abovementioned, and request that the Corporation shall execute to them an assignment of the claim against Haji Fateh Mahomed for the party and party costs. I need hardly add that this request is reasonable and proper. They further request that the monthly rent, which is intended to be recovered with a view to preserve the rights of the Corporation, may be reduced to Re. 1 per annum; but in order that the matter may not be lost sight of, and that no difficulty may arise in future, I prefer that the rate should be Re. 1 per mensem.

The land which has been built upon on Fergusson Road measures about 61·12 square yards, shown in scored red on the accompanying plan, and was purchased at the rate of annas six a square yard along with other land acquired in connection with the construction of Fergusson Road, and the Engineer does not consider it worth more than Rs. 3 a square yard at present.

Under the circumstances I have the honor to request the Standing Committee to recommend the Corporation to sanction the sale of the land above referred to, to the mortgagees at Rs. 3 per square yard, and to allow the encroachments over the pipe line above 12′ to remain on payment of Re. 1 per mensem, removable at a month's notice, and to grant the required assignment of the party and party costs.—I have, &c.,

H. A. ACWORTH, Commissioner.

Resolved: "That letter No. 2955, dated 11th instant, from the Commissioner, be forwarded to the Corporation, with a recommendation that sanction be given to the sale of 61·12 square yards of Municipal land at Fergusson Road to Messrs. Kandas Brijvalabhdas, Keshav Dalal, Shivlal Sumbhulal Khandvala and Tuljaram Gulabdas Khandvala at the rate of Rs. 3 per square yard, and to allow all encroachments above 12′ from the ground mentioned in the said letter to remain on sufferance on the following conditions :—

No. 1572.

"1. That the parties above named pay to the Municipality the sum of Rs. 1,693-5-0, the party and party costs in the suit brought by the Municipality against Hadji Fateh Mahomed.

"2. That they enter into an agreement to remove the encroachments before mentioned at any time hereafter upon receiving one month's notice so to do, and to pay the rent aforesaid.

"3. That all costs and expenses of the said agreement and of the stamping and registration thereof and of the assignment hereinafter referred to, including the costs of stamping and registration thereof, whether of the said parties or of the Municipality, be paid by the said parties.

"4. The Municipality will execute an assignment of their claim against the said Hadji Fateh Mahomed for the costs aforesaid.

"5. The said agreement and assignment to be prepared by the Municipal Solicitors, and to be accompanied, where necessary, by plans."

Considered the following :—

No. 1942 OF 1893-94.

BOMBAY, 28*th April* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—I have the honour to submit to the Corporation for consideration and approval plans and estimates for the following works :—

A.—Roads in Agripada north of Bellasis Road.
B.—Storm-water drains in the same.
C.—Storm-water drains and sewers in Connaught and Sussex Roads.

The estimates are for A..... Rs. 2,93,010
" " B..... Rs. 2,32,198
" " C..... Rs. 51,916.

or a total of Rs. 5,77,124.

I do not propose to proceed at once with the construction of all roads sanctioned by the Corporation in the area of Agripada referred to. It is not in my judgment either necessary or expedient to do so. We shall probably obtain better prices for the frontages of the roads I propose to defer after the four roads, which I think ought at once to be proceeded with, have been made and their frontages sold off. The roads which I propose to proceed with at once, and concerning which I think there can be no doubt, are:—

Morland Road (completion),
Gilder Street (completion),
Souter Road (from Arthur Road to Morland Road),
Club Street (from Gilder Street to Morland Road).

The cost of constructing these will be, including 15 per cent. contingencies, Rs. 1,80,901, to be met out of the 15 lakhs loan, and I should have directed the work to be proceeded with without fresh sanction, the wishes of the Corporation on the subject being quite indubitable, but that I desire to construct the storm-water drains at the same time as the roads, thus avoiding the necessity of future excavations in roads already made and saving expense. The cost of storm-water drains in these roads, provided they are constructed at the same time as the roads, will be Rs. 1,28,288. It may probably be asked why I do not at this time make any proposals for sewers in the same roads, but the reason is that over the greater part of the area in question the sewerage cannot be carried out by direct gravitation. The introduction of some lifting machinery will be required, and the Corporation may perhaps be hardly inclined to apply the Shone system to it, though in my judgment it would be both safe and expedient to do so. The consideration of this branch of the subject will, however, take time, and it is very undesirable that the construction of roads, which are so urgently demanded, should any longer be deferred. Buildings erected, therefore, before the Corporation have come to a decision on the subject of sewerage may either be drained into cesspools or connected with the storm-water drains, which, being ovoid, will serve as a temporary expedient.

The cost of the storm-water drains will have to be met from loan funds, and may be advanced against the loan which will have to be floated probably this autumn.

In according sanction to the construction of these roads and storm-water drains, it may be well for the Corporation to consider whether any limitation should be placed on the style and class of building to be erected along the roads. It seems to me to be highly desirable that some restriction should be imposed which will prevent the erection of such chawls as have been built between Morland and Ripon Roads and as will prevent crowding. There is a large demand in this neighbourhood for small bungalows, and the most eligible class of building, along, at all events, Morland Road and Club and Gilder Streets, would be one similar to those which have been erected on the east side of, and abutting on, the southern section of Morland Road. It may not be possible or advisable to

insist that all buildings along these three roads should be bungalows with gardens, but it would be well to arrange so that the buildings should not be too close together and should not be of the class which is liable to overcrowding, that is, which is let out in single rooms. It may be well to make it a condition that the buildings to be erected shall be approved by the Municipality and to say that chawls will not be approved. The frontages are admirably adapted not only for bungalows but for large shops and places of business. Of course such a restriction as I suggest or any other will diminish the price which the frontages will realise, but I think the Municipality have other interests to serve besides those which are merely pecuniary, and I deprecate the excellent frontages along these principal roads, or at all events the three of them last named, being put to uses which will disfigure fine building sites and inevitably, in spite of all rules to the contrary, conduce to insanitary conditions in the locality.

The cost of the storm-water drains and sewers in Connaught and Sussex Roads, Rs. 51,916, will have to be advanced against the future loan above referred to.

I may add that the whole of the storm-water drains alluded to in this report are so designed as to work in with the general system of storm-water drains throughout the City.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 1573. *Resolved* : "That the consideration of the Commissioner's letter No. 1942, dated 28th ultimo, be postponed till next week."

Read the following :—

BOMBAY, 12*th May* 1893.

TO THE CHAIRMAN OF THE STANDING COMMITTEE.

SIR,—On behalf of our client, Nawab Mahomed Kamalkhan, we have the honour to address you as follows :—

Our client is the proprietor of a large property at Lower Colaba, known as the Grant Buildings, which is at present tenanted by over a hundred European families. In the vicinity of this property the Municipality is constructing a building for the deposit of night-soil, which will prove a serious nuisance to the inmates of the adjoining properties, including the Grant Buildings, owing to the use to which it will be put. The report that the building which is now in the course of construction is to be used by the Municipality as a night-soil depôt has attracted considerable attention of the tenants of our client's property and several of them have threatened to vacate the premises no sooner the depôt is used for the purposes for which it is built. This will entail on our client a great loss and will seriously affect the value of his property, for which our client will hold the Municipality responsible. We are therefore instructed to bring the above facts to your notice in the hope that the Standing Committee will take them into consideration and decide upon remov-

ing the depôt to some other less populated quarters more suited for the purposes and will not give occasion to our client's tenants to complain of the nuisance or give rise to any litigation in respect thereof between the Municipality and our client.—Yours, &c., FRAMJI & MOOS, Solicitors, High Court.

Resolved : "That the following be referred to the Commissioner and that Messrs. Framji & Moos be informed accordingly :—Letter, dated 12th instant, from Messrs. Framji & Moos, on behalf of their client, Nawab Mahomed Kamalkhan, objecting to the erection of the proposed night-soil depôt near their property at Colaba."

No. 1574.

Resolved : "That the following be referred to the Commissioner for favour of remarks :—Resolution of the Corporation, No. 1305, dated 8th instant, as under :—"That the Government letter on the Commissioner's Administration Report be referred to the Standing Committee and the Municipal Commissioner, to furnish the Corporation with a report on the subject."

No. 1575.

Resolved : "That, with reference to the resolution of the Corporation No. 1532, dated 15th instant, the Committee approve, under the terms of section 90 (2) of the Municipal Act, that the price of the 370 square yards or thereabout of land to be acquired from the Parsi Punchayet at Gibbs Road shall be Rs. 5 per square yard."

No. 1576.

Proposed by E. B. Carroll, Esq., seconded by Grattan Geary, Esq.—

"That, with reference to their resolution No. 1533, dated 15th instant, the Corporation be recommended to sanction the payment of the balance of the cost of constructing the said 9" pipe sewer therein referred to, Rs. 4,246, from savings in the grant of Rs. 77,603 for the drainage of the Parel village."

No. 1577.

Carried.

Resolved: "That the following be *recorded*:—Memorandum No. 1525, dated 15th instant, from the Acting Secretary, to the Chairman, submitting for consideration and orders of the Committee an estimate amounting to Rs. 402, with sample of morocco leather for re-covering the present Council Hall table."

No. 1578.

The following return was read and *recorded* :—

No. 1579. Return of fires at Bellasis Road, Nowroji Hill Road and Mandvi Street, forwarded with the Commissioner's memorandum No. 3124, dated 15th May 1893.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 14th May 1893.

It was agreed that the next meeting of the Committee be held on Thursday, the 25th instant, at 3 P.M., as Wednesday, the 24th idem, is a public holiday.

BOMBAY, 25*th May* 1893.

AT the meeting of the Standing Committee, held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; R. G. OXENHAM, Esq., M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the meeting, held on the 17th instant, were signed.

The seal of the Corporation was affixed (1) to deed of agreement between Haji Kurmally Hajibhai and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property No. 1, DeLima Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 5 per square yard for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition ; (2) to ditto between Haji Ali Mahomed Haji Kasam and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises No. 101-103, situate at Naran Dhuru Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed. Possession of the land required for street improvement to be now given up without payment of any compensation in respect of it ; and (3) to deed of agreement with the Secretary of State for India in Council for the lease of 789 square yards of Government land at Mahim.

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* *See* Appendix C. † *See* Appendix B.

Read the following :—

BOMBAY, *18th May* 1893.

FROM CRAWFORD, BURDER, BUCKLAND AND BAYLEY,
TO THE MUNICIPAL COMMISSIONER.

SIR,—We have the honour to return the correspondence forwarded under your No. 3137, dated the 15th instant, and also the original agreement received under your No. 3383, dated the 17th instant. This agreement, after reciting that Mr. DeSouza has done work in contravention of section 347 of the Municipal Act within the regular line of the street, and has thereby rendered himself liable to have such unauthorized work demolished and to have his house set-back, purports to provide that in consideration of the Commissioner agreeing to forego his present right to insist on such demolition and set-back, he (Mr. DeSouza) shall not, in case of the set-back being thereafter required, claim or be entitled to receive any compensation for the unauthorised work. The document further contains a covenant by Mr. DeSouza, that in case of his selling the property he will make it a condition of such sale that the purchaser shall, at his own expense, enter into a similar covenant with the Corporation. We think that the consideration stated, namely, the forbearance to enforce at present the admitted right of demolition and set-back is sufficient to support the covenant by DeSouza that he shall not claim or be entitled to compensation for the unauthorized work in case the set-back is hereafter required, and that so long as DeSouza continues to be the owner of the property effect can be given to this provision, should the circumstances arise which will render it necessary to do so; but that in case of his selling the property and failing to fulfil his undertaking to procure a similar covenant from the purchaser, the agreement could not be enforced as against such purchaser, and the only remedy in that case would be in damages against DeSouza personally. This point we explained fully to the Commissioner in our letter of the 16th November 1882 in connection with the deed of covenant then prepared with one Hormusjee Jamsetjee Chinai in respect of the deferred set-back of his property No. 69, Lawrence DeLima Street. The following is an extract from our letter :—" We think it right to point out that covenants of this kind do not (to use a technical expression) run with the land, that is to say, they are not binding, and cannot be made binding, on a purchaser from the covenantor unless such purchaser himself enter into a similar covenant at the time of purchase. To secure, as far as possible, the desired object, we have added a covenant that in case of Hormusjee selling to another person, before the option of purchase is exercised by the Municipality, he shall make it a condition of the sale that the purchaser shall enter into similar covenants with the Municipality, but in case of a breach of this undertaking the remedy would be against Hormusjee or his estate, and not against the purchaser, and would

be in damages only." In the case just mentioned (Hormusjee Jamsetjee Chinai's case) the arrangement was that in consideration of the Commissioner refraining at the time from enforcing demolition and set-back, he should, for a period of five years, have an option of purchase of the whole property at a fixed price; in other cases the right of set-back is foregone until the happening of certain specified events (as, for instance, the set-back of other neighbouring houses or the re-building of the property itself), after which it is provided that the land shall be acquired at a fixed price. In all such cases the express terms of the agreement, it seems to us, preclude the possibility of the owner successfully contending that the possession of the set-back land which he is allowed to retain for the time or pending the happening of the events contemplated, can, until after such time or the happening of such events, become adverse possession, such as would, after the lapse of twelve years, bar the right to acquire the land at the price agreed to. We are therefore of opinion that, subject to what we have said regarding the effect of a sale of the property by the covenanting party, the Corporation would be able to enforce such an agreement at the time or on the happening of the event contemplated by the agreement for its performance, notwithstanding that this might be more than twelve years after the date of the agreement.—We have, &c.,

CRAWFORD, BURDER & Co.

No. 3690 OF 1893-94.

BOMBAY, 22*nd May* 1893.

Copy forwarded to the Standing Committee for information, with reference to para. 2 of their resolution No. 1342, dated 10th instant.

H. A. ACWORTH,
Commissioner.

Proposed by G. W. Roughton, Esq., seconded by A. G. Viegas, Esq.—

No. 1622. "That, in future, all agreements relating to set-back should only be agreed to upon the basis of the Municipality taking over possession of the land and the unauthorised erections thereon at such price for the land as may be agreed on between the Municipality and the reputed owner; and leasing such land and erections at a rental to be fixed by the Municipal Commissioner."

Carried.

No. 1623. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 3389 to 3401, dated 18th instant, and No. 3680, dated 22nd idem, sanction be given, under section 351 (2) of the Municipal Act,

to the removal of the following structures built without permission :—

Names of Owners.		Where.
Mr. Balkrishna Harichandraji	...Building	at No. 127-129, Old Hanuman Lane.
„ Ebrahim Chand Kasai ...	... Do.	at Khetwadi Back Road.
„ Chatoorbhooj Morarji ...	... Do.	at No. 38, Tardeo Road.
„ Abdoola Meya Khandwani	... Do.	at Tardeo Road, Mahaluxmi.
„ Gurmukhrai Sookhamand	... Do.	at No. 42-44, 2nd Bhoewada."

No. 1624. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 3855, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 1625. *Resolved* : " That the following be *recorded*:—Letter No. 3621, dated 20th instant, from the Commissioner, reporting that he has sanctioned the purchase of a road watering apparatus from Messrs. Merryweather & Sons, of Longacre, London, at a cost of £78-10-0 delivered in Bombay. Stating that the apparatus consists of (*a*) Merryweather's improved hydraulic hose-reel and street watering apparatus mounted on high wood spoke wheels ; (*b*) 300 feet of Merryweather's nonkinkable red vulcanized hose, $1\frac{1}{2}''$ in diameter, in 3 pieces, each 100 feet long, fitted with gunmetal coupling screws, bound in with copper wire, leather guards and straps complete ; and (*c*) one stand pipe to fit into a 2″ ferrule with a stop cock and a nozzle fitting. The amount to be met out of the grant of Rs. 6,000 for the purchase of 30 hydrants and 1,000 feet of Merryweather's patent rubber and canvas hose."

Proposed by E. B. Carroll, Esq., seconded by the Hon'ble Mr. Fazulbhoy Visram—

No. 1626. " That letter No. 1942, dated 28th ultimo, from the Commissioner, be forwarded to the Corporation, with a recommendation that sanction be given to the construction of (1) the following roads in Agripada, north of Bellasis Road, at an estimated cost of Rs. 1,80,901 to be met from the Rs. 15 lakhs Loan for roads in Agripada, *viz.*:—

Morland Road—(completion),
Gilder Street—(completion),
Souter Road—(from Arthur Road to Morland Road),
Club Street—(from Gilder Street to Morland Road);

(2) Storm-water drains in the abovenamed roads at an estimated cost of Rs. 1,28,288 ; and (3) storm-water drains and sewers in Connaught and Sussex Roads at an estimated cost of Rs. 51,916. The cost to be met by advances from loan and other surplus balances to be adjusted against the loan which has to be hereafter raised. (4) The Standing Committee concur with the views of the Commissioner expressed in the said letter in regard to the style and class of buildings to be erected along the new roads in Agripada."

Amendment proposed by Kaikhosro N. Kabraji, Esq., seconded by Accacio G. Viegas, Esq.—

"That the last para. of the proposition be omitted."

On a division, the amendment was *lost*, the votes being 2 *for* and 5 *against*.

The original motion was *carried*, the votes being 6 *for* and 1 *against*.

No. 1627. *Resolved* : "That, as applied for by the Commissioner in his letter No. 3454, dated 18th instant, the Committee approve, under the terms of section 91 of the Municipal Act, to his applying to Government to acquire, under the Land Acquisition Act, 111 square yards or thereabouts of land, the property of Mr. Pestonji Nasserwanji and situate at Koliwada, Mazagon, the land in question being required for a public purpose, *viz.*, for the erection of a latrine thereon."

No. 1628. *Resolved* : "That the following be referred back to the Commissioner, as there appears to be some doubt as to the applicability of the section to the case :—Memorandum No. 3328, dated 17th instant, from the Commissioner, requesting sanction, under section 377 of the Municipal Act, to a notice being served on Mr. Joosub Rahimtula, requiring him to remove the Dhobies washing on the low-lying ground belonging to him, east of Hancock Bridge near Valpacady, Mazagon Road, in consequence of the nuisance there through the want of drainage."

No. 1629. *Resolved* : "That, as applied for by the Commissioner in his letter No. 3618, dated 20th instant, sanction be given to the appointment of Mr. N. H. Chowksi as Municipal Medical Examiner during the absence of Mr. Cama from the 10th idem to the 10th proximo."

In accordance with notice, it was proposed by E. B. Carroll, Esq.—

"That the Municipal Commissioner be asked to report the quantity (approximately) of sea-water raised by the Persian wheels at Chaupati and the Vellard and the cost of working and maintaining the arrangements, including the iron tanks, containing sea-water, with the object of showing whether it is worth while to retain these unsightly structures for the advantages gained.

No. 1630.

"Also to ask the Municipal Commissioner's opinion as to whether it will be necessary to continue the use of the fixed iron tanks throughout the city used in connection with road watering, now that there is a sufficient and nearly constant supply of water, or whether hydrants to fill the water carts would not be cheaper and better.

"Further, if the Municipal Commissioner considers that the tanks must be maintained, can he propose some design of tank, masonry or other, which will not be so unsightly as the present tanks."

The motion was seconded by K. M. Shroff, Esq.

Mr. Roughton raised the point of order as to whether the notice of motion was one which the Standing Committee could entertain.

The Commissioner having expressed his willingness to supply the information, the Chairman ruled that the motion was in order.

Carried.

Resolved: "That the progress report up to the end of March 1893 of new works in course of construction be laid on the table and brought on for consideration next week."

Resolved: "That the following be laid on the table :—

Letter, dated 16th instant, from Messrs. Ardaśir Framjee Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of April last, and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding summary and statement of their scrutiny of accounts."

No. 1631.

Resolved : "That the following be forwarded to the Commissioner and that the applicant be informed accordingly :—Letter, dated 19th instant, from Mr. Goculdass Anandjee Pitharia on the subject of the assessment of his property situate at No. 2, Nowrojee Hill Road, and the water connection to the same." No. 1632.

Resolved : "That the following be forwarded to the Commissioner and that the applicant be informed accordingly :—Letter, dated 17th instant, from Mr. Dhundiraji Vinaek Biwalker on the subject of encroachment made by Mr. Narottam Anandji on the public passage in Old Hanuman Lane." No. 1633.

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 21st May 1893.

On enquiry from the Chairman as to the very short supply of water on the Girgam Road, not to be had even on the first and second floors, the Commissioner reported to the Committee that the present short supply of water in certain districts was due to the burst of the 27″ main last week and to a further burst in the 48″ main this day. The last burst, he stated, would probably be repaired by Saturday, and it would be some days yet before the supply to high floors would be satisfactory.

BOMBAY, 31*st May* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the meeting held on the 25th instant, were signed.

The seal of the Corporation was affixed to (1) deed of contract (in duplicate) with Messrs. Richardson & Cruddas for the supply of stoneware pipes for Colaba sewerage works; (2) ditto with Messrs. Heptula No. 1742.

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* *See* Appendix B.

Sheik Adam & Co. for the supply of 2,000 cases of kerosine oil; and (3) ditto with Messrs. Spencer & Co. for the work of filling up and metalling ground at Chinchpokli, Junction of DeLisle and Clerk Roads.

Resolved: "That, as applied for by the Commissioner, in his memorandum No. 4306, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 1745.

Resolved: "That the following be *recorded*:—Letter No. 3864, dated 25th instant, from the Commissioner, reporting that he has sanctioned, from time to time, the purchase of articles, as per statement submitted, from Messrs. Richardson & Cruddas, for the experimental house connection work. The cost, aggregating Rs. 3,666-6-0, to be met out of the grant for Rs. 10,000 sanctioned for the work."

No. 1746.

Read letter No. 4180, dated 29th instant, from the Commissioner, to the Secretary, as under:—

SIR,—With reference to Standing Committee's Resolution No. 1564 of the 17th instant, I have the honor to forward herewith a copy of Municipal Solicitors' letter, dated 25th idem, and to request that as therein advised the Standing Committee will be pleased to sanction the institution of a suit against both the lessor (not in the capacity of a Fazindar) and the lessees. Should the Standing Committee deem it necessary to have Counsel's opinion on the point raised in the resolution above referred to, for future guidance, it will be obtained.—I have, &c., H. A. ACWORTH, Commissioner.

BOMBAY, 25*th May* 1893.

FROM MESSRS. CRAWFORD, BURDER, BUCKLAND & BAYLEY,

To H. A. ACWORTH, Esq.,
Municipal Commissioner.

SIR,—In acknowledging the receipt of your No. 3757, dated 22nd instant, we have the honor to state that from a perusal of the Standing Committee's Resolution No. 1564, dated the 17th instant, we are under the impression that there may have been a misapprehension as to the grounds on which we advised that proceedings should be taken in the Small Cause Court against the lessor Mahomedbhai Ebrahim, as well as against the lessees. Upon the papers which were before us there appeared to be *prima facie* grounds for doubting whether in fact possession had ever been given to or taken by the lessees under the lease originally contemplated, and whether that lease had ever been in any way acted upon except in so far as the payment of certain rent in advance

was concerned. Whether, in other words, Mahomedbhai Ebrahim and the two lessees did in fact stand to each other in the relation of Fazindar and Fazindari tenants.

As Fazindar it is, we think, no doubt the case that, having regard to Section 146 (1) of the Municipal Act, the property taxes would *not* be primarily leviable from Mahomedbhai Ebrahim, but if, as was alleged by the lessees, the lease was treated as cancelled and the lessees never put in possession, he would apparently be liable for the Municipal taxes not as Fazindar, but as the person in whom the right to let the premises vested. The lessees having apparently certainly paid no rent since the first payment in 1889, it seems improbable that Mahomedbhai Ebrahim had allowed them to remain in possession if they ever had it, and the facts being altogether in dispute, it appeared to us, and still appears to us, worthwhile to incur the trifling risk of making him a party to the proposed suit, but not as Fazindar.

It is we think clear that a Fazindar or owner of property let on Fazindari tenure cannot as such be proceeded against personally for property taxes in respect of the property of which he is Fazindar, and as our views on this point are apparently in accord with those expressed by Mr. Roughton at the recent Standing Committee meeting, it may possibly not be thought worthwhile under the circumstances to refer the point for the opinion of Counsel. Should this, however, still be deemed desirable, we will lose no time in referring the matter to Mr. Inverarity on his return to Bombay. We return the papers.—We have, &c.,

CRAWFORD, BURDER & Co.

No. 1747. *Resolved*: "That letter No. 4180, dated 29th instant, from the Commissioner, be *recorded*.

"2. That, as applied for by the Commissioner, in his letter No. 3005, dated 12th instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. Mahomedbhai Ebrahim, the lessor, and Messrs. Heptulla Mula Hyderbhai and Abdul Rahiman Abdul Kadur, the lessees, for the recovery of property taxes in respect of properties, E. Ward, Nos. 4071 (4), 4071 (6), 4071 (7), 4071 (9), as per list submitted."*

No. 1748. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 4223, dated 30th instant, the Committee approve, under section 381 of the Municipal Act, to notices in writing being served on the owners of quarry-holes as per following statement, requir-

* *Note.*—At the suggestion of Mr. G. W. Roughton, the Commissioner agreed to consider whether Fazindars are not liable to pay taxes as owners of the Fazindari rents they receive.

ing them to fill in these holes, as the Health Officer considers them likely to cause or be a nuisance to the public :—

Name of present occupant.	Station.
Tookaram Ranojee	Mahim Agar.
Do. do.	„
Vishnu Nursing Nalband	„
Trimbuck Gungadhur R.	„
Tukaram Ranojee	„
Vithoba Tookaram Varadi...	„
Do. do.	„
Trimbuck Gungadher R.	„
David Sassoon Mills	„
Do. do.	„
Jaidia Tooljiaram Laldas	„
Bai Kankoobai, widow	„
Harischandra Dhanaji	„
Taijoo Kaya Wani	„
Trimbuck Gungadhur R.	„
Kashinath Dewjee Dhuru	„
Do. do.	„
Do. do.	„
Lungda Vinus	„
Do.	„
Bhasker Vasudeoji	„
Do. do.	„
Vithoba Trimbuck	„
Do. do.	„
Do. do.	„
Trimbuck Gungadhur R.	„
Jao Pedroo Kiny	„
Taijoo Kaya Wani	„
Tookaram Ramjee Giday	„
Tookaram Ranojee Giday	„
T. Vullubdas Luckmidas	„
Tookaram Ranojee	„
Do. do.	„
Do. do.	Dadar.
Balgowandas Hurgowandas	Mahim.
Merwan Khodadad Erani	Dadar.

Proposed by the Hon'ble Mr. Fazulbhoy Visram, seconded by E. B. Carroll, Esq.—

No. 1749. "That, as applied for by the Commissioner, in his letter No. 4178, dated 29th instant, sanction be given to his purchasing from Messrs. Khursedji & Sons, of Kirkee, 15 pairs of bullocks at Rs. 150 per pair and 15 pairs at Rs. 120 a pair for the Health Department. The cost, Rs. 4,050, to be met from the Budget grant for the same.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as Messrs. Khursedji & Sons have for many years past supplied this Municipality with bullocks and are specially engaged in the trade."

On a division, the motion was *carried* by 5 votes *for* and 1 *against*.

Resolved : "That the following be *recorded*:—Letter from the Commissioner, No. 4222, dated 30th instant, reporting that he has sanctioned the purchase of 1,100 feet of hose for the Victoria, Elphinstone Circle, and Falkland Road gardens from Messrs. R. Babajee & Co., at 12 annas per running foot. The total cost, Rs. 825, to be met out of section II, stores and petty charges for the respective gardens."

No. 1750.

Resolved : "That, as applied for by the Commissioner, in his letter No. 4179, dated 29th instant, and with reference to the resolution of the Committee No. 648, dated 19th April last, sanction be given, under the terms of section 79 (2) of the Municipal Act, to the further modification of the schedule of appointments at the Love Grove pumping station as shown below":—

No. 1751.

Designation.	Pay.	Conveyance Allowance.	Remarks.
	Rs.	Rs.	
1st Engineer	400	50	
2nd do.	300		
3rd do.	85		
4th do.	75		
Clerk	25		
Driver	20		
Do.	20		
Do.	20		
Fireman	18		
Do.	18		
Do.	18		
Winch Driver	15		
Do.	15		
Oilman	15		
Do	15		
Do.	15		
E. L. Oilman	15		
Fitter	40		
Kilnman	12		
Do.	12		
Coalman	10		
Do.	10		
Do.	10		
Do.	10		
Do.	10		
Do.	10		
Do.	10		
Laskar	10		
Malli			
Total Rs.	1,233	50	

In accordance with notice, it was proposed by E. B. Carroll, Esq.:—

"That the Commissioner be requested to furnish the Standing Committee with information on the following points in regard to set-backs :—(1) —

No. 1752.

The number of cases during the past three years in which agreement for set-back have been entered into, shown by localities*; and (2) an estimate of the cost which would have been incurred if all the properties concerned had been immediately acquired."

The motion was seconded by Grattan Geary, Esq., and *carried.*

Considered the Progress Reports, up to the end of March 1893, of new works now in course of construction†

Resolved: "That the Progress Reports of new works in course of construction up to the end of March 1893 be *recorded.*" No. 1753.

The following statement ‡ was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 28th May 1893.

BOMBAY, *7th June* 1893.

AT the Meeting of the Standing Committee held this day there were present:—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L. M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.,; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I. C. S., Commissioner; and the ACTING SECRETARY.

The minutes of the Meeting held on the 31st ultimo were signed.

The seal of the Corporation was affixed to deed of agreement (in duplicate) between Mr. Ismaeljee Sullemanjee and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property Nos. 114-116, Guzar Street (Bhendy Bazar), without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 15 per square yard for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition. No. 2180.

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* The words "shown by localities" were added to the motion on the suggestion of Mr. Kabraji.

† *See* Appendix D. ‡ *See* Appendix B.

The seal was also affixed to deed of contract with Messrs.
No. 2181. Spencer & Co. for the construction of storm water drains on Dadar Road, Sleater Road and in Chikalwady.

Resolved : "That, as applied for by the Commissioner in
No. 2182. his memorandum No. 4212, dated 30th ultimo, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of Owner.	Where.
Mr. Mahadeva Yedneshwar Mogay.	Building at Nos. 33-35, Mahim Bazar Road.

"That the consideration of memorandum No. 4213, dated 30th ultimo, from the Commissioner on the subject of the removal of building at Nos. 5, 7, Kalbadevi Road, the property of Mr. Narayen Keroba Bhende, be postponed till next meeting and that the papers in connection therewith be laid on the table."

Resolved : "That, as applied for by the Commissioner in
No. 2184. his memorandum No. 4801, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Resolved : "That, as applied for by the Commissioner in
No. 2185. his letter No. 4239, dated 30th ultimo, sanction be given, under Section 169 (1) (*b*) of the Act, to compounded monthly sums being charged in cases of owners who pay water-tax on valuation on their properties, using for building purposes connected with those properties water drawn from the unmetered connections therein. Such compounded sum to be based on the trade rate and on an approximate estimate of the quantity of water so used. Any user objecting to this arrangement will be at liberty to pay the trade rate by meter."

Resolved : "That, as applied for by the Commissioner in
No. 2186. his memorandum No. 4393, dated 1st instant, sanction be given, under the terms of Section 381 of the Municipal Act, to notices in writing being served on Mr. Motichund Sheolal, Gungabai, and Shri Nathjee Maharaj, owners of houses Nos. 350—356, Sheik Memon Street ; 23—25, Vithalwady ; and 19—21, Vithalwady, respectively, requiring them to cleanse the well attached to their premises, as the water of the same is a nuisance."

It was agreed by 6 votes against 3 that the consideration
No. 2187. of the Commissioner's memorandum No. 4585, dated 5th instant, on the subject of the cleaning of the well at No. 102, Jairajbhoy Street, be postponed, and that the Commissioner be requested to write to Mr. Noor Mohomed Jairazbhoy Peerbhoy in the first instance calling his attention to the state of the water in the well.

Resolved : "That, as applied for by the Commissioner,
No. 2188. in his memorandum No. 4585, dated 5th instant, sanction be given to the transfer of Rs. 163-5-4 from savings in the Executive Engineer's Department, General Supervision and Miscellaneous duties, Section I, Superior Staff, salary of the Executive Engineer, to Accounts and Expenditure, Audit Establishment, Section I, Establishment, Superior Staff, to meet acting allowance payable during the absence of the Deputy Accountant on privilege leave."

Resolved : "That, as applied for by the Commissioner in
No. 2189. his memorandum No. 4584, dated 5th instant, sanction be given to the payment of Rs. 1-4-0, being the amount of four days' full wages to Rama Baloo, a Persian wheelman, who was injured in the execution of his duties and was unable to attend his work for those days."

Resolved : "That, as applied for by the Commissioner
No. 2190. in his letter No. 4654, dated 5th instant, the Committee approve, under the terms of Section 501 of the Municipal Act, of Rs. 70 being paid to Raghoo Madhoo Bankar Malee as compensation for his crop which was destroyed in consequence of the land under cultivation being flooded, owing to the burst of the Tansa main at Supari Bag Road. The amount to be met from the Tansa contingencies pending settlement of the question as to its recovery from the contractors, Messrs. Sittaram Luxmon & Co., who laid the Tansa main."

Resolved : "That, as applied for by the Commissioner in
No. 2191. his letter No. 4656, dated 5th instant, sanction be given, under the terms of Section 69 (*e*) of the Municipal Act, to the variation of Messrs. Bhedwar & Co.'s contract, for the construction of Connaught and Sussex Roads, whereby the contract time shall be extended to 23rd June 1893."

Resolved : "That the following be *recorded* :—Memo-
No. 2192. randum No. 4273, dated 31st ultimo, from the Commissioner, reporting that no house or portion of any house had fallen during the month of April last."

Resolved: "That, with reference to their resolution
No. 2193. No. 2135, dated 5th instant, the Corporation be recommended to sanction, from surplus cash balance, the sum of Rs. 2,500 to meet the cost of a suitable casket to contain the address which is to be presented to H. R. H. the Duke of York on the occasion of his marriage with the Princess May of Teck, and Rs. 350 to meet the cost of engrossing and forwarding such address.

"That the Chairman be requested to place this question before the Corporation at the adjourned meeting fixed for the 12th instant as 'urgent business' under Section 36 (*l*) of the Act."

Read letter No. 4744, dated 6th instant, from the Commissioner to the Secretary, as under :—

SIR,—Before any final resolution is or can be come to by the Corporation as to the future lighting of the City, it is necessary, as I informed the Corporation at length in my speech when the consideration of the last budget was before them, that the new Welsbach burner should be given a thorough trial. I also informed the Corporation that the manager of the Gas Company was willing to allow the existing gas contract to be extended on the existing terms for one year, in order that opportunity might be given for a thorough trial of the experiment in question, which the coming monsoon will afford. I have made arrangements for the erection of 65 Welsbach burners on existing gas lamps and for the necessary means of testing the amount of gas actually consumed by them. I have now the honor to request Standing Committee's sanction to a contract being entered into with the Gas Company on the present terms for one year from 1st July 1893 to 30th June 1894. The Solicitors advise that the enclosed form of contract will suffice to effect the object, and, on sanction being given to it, I will have it drawn up in proper form and presented for sealing and signature.—I have, &c., H. A. ACWORTH, Commissioner.

"Memorandum of Agreement dated this day of June 1893 whereby it is agreed between the within named Gas Company of the one part, and Harry Arbuthnot Acworth, Municipal Commissioner for the City of Bombay for and on behalf of the Municipal Corporation of the other part, that the within written agreement shall be extended for one year from the 1st day of July next it being the intent and meaning hereof that the provisions of the

said agreement shall (*mutatis mutandis*) be read and construed and shall take effect in all respects as if the period of duration fixed by clause 2 thereof had been four years instead of three years from 1st July 1890."

No. 2194. *Resolved*: "That, as applied for by the Commissioner in his letter No. 4744, dated 6th instant, sanction be given to his entering into a contract with the Gas Company for lighting the City with gas for a period of one year from 1st July 1893 to 30th June 1894 on the same terms as the existing contract."

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 4th June 1893.

No. 2195. On the suggestion of A. G. Viegas, Esq., it was agreed that the Water Engineer be requested to attend the next meeting of the Committee and explain the distribution of water at present supplied to the City.

No. 2196. Dr. Viegas called attention to the quality of water delivered at No. 11, Pedder Road, and produced samples of the water which had been sent to him.

After discussion the Commissioner agreed to place analyses of the water from the three lakes—Tansa, Vehar and Tulsi—before the next meeting.

No. 2197. Read and recorded letter No. 4823, dated this day, from the Commissioner to the Secretary as under:—

SIR,—I have the honour to report, for the information of the Standing Committee, that I have accepted the tender of Messrs. Haji Ebrahim Brothers, the lowest of six tenders received for the supply of clothing for the Fire Brigade and Water Works Departments, for Rs. 2,032-12-0 and Rs. 2,369-14-0 respectively. The cost for the former can be met out of Rs. 2,500 provided in the current year's budget for clothing to the Fire Brigade, and the latter out of the water works contingent grant.—I have, &c., H. A. ACWORTH, Commissioner.

No. 2198. *Resolved*: "That, as applied for by the Commissioner in his letter No. 4655, dated 5th instant, sanction be given to the temporary employment of two draftsmen in the Executive Engineer's Department on Rs. 30 each. The amount to be met from the saving of Rs. 60 in the pay of a surveyor of the Water Works Department who is at present working at the Love Grove Pumping Station."

* *See* Appendix **B.**

BOMBAY, 14*th June* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; KAIKHOSRO N. KABRAJEE, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; the WATER ENGINEER; and the ACTING SECRETARY.

The minutes of the meeting held on the 7th instant, were signed.

A letter of apology, dated 13th instant, for non-attendance was received from E. B. Carroll, Esq.

The seal of the Corporation was affixed (*a*) to 1 attested duplicate Debenture No. 2112 of the Water Works and Drainage Loan, Rs. 500; (*b*) to 23 ditto, Nos. 1528-37, 2763-65, 2768, 2778, 3951, 3952, and 4905-10, of the Municipal Loan of 1878, of Rs. 500 each; (*c*) to 61 ditto ditto, Nos. 77 NN., 78 NN., 464 NN., 471 NN., 472 NN., 1480 NN., 756-62 NN., 765-69 NN., 1177 NN., 1230 NN., 1344-63 NN., 1456 NN., 1692 NN., 2332-33 NN., 2337 NN., 2395 NN., 2525 NN., 2579 NN., 2586-94 NN., 3119 NN., 3183-84 NN., and 7376 NN., of the Bombay Municipal Sanitary Works Loan of 1885, of Rs. 500 each.

No. 2430. The Commissioner reported the result of the tenders for the 42 lakhs loan to repay to Government the balance of the consolidated Tulsi Loan on 1st July 1893. The offers received were to the extent of over Rs. 71¼ lakhs; the whole of the 42 lakhs were offered to be taken over by one tenderer at Rs. 101-2-0. The highest rate offered was Rs. 103 and the lowest Rs. 95. The Committee sanctioned the acceptance of rates varying from Rs. 101-3-0 to Rs. 103 for various amounts aggregating Rs. 631,500, and the balance of the loan was allotted *pro rata* to tenderers at Rs. 101-2-0, all tenders below Rs. 101-2-0 were rejected. The average rate at which the whole loan has been raised was Rs. 101-2-8. Of the rejected tenders, only Rs. 60,000 were below par, Rs. 1,10,000 were at par, and the balance, a little over 27½ lakhs, were above par (Rs. 101-2-0 and below).*

* For statement of offers received, *see* file of confidential papers kept by the Municipal Secretary.

No. 2431. *Resolved*: "That, as applied for by the Commissioner, in his memoranda Nos. 4778 and 4863, dated 7th and 8th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Khanderao Bhasker	Building at Parel Village Road.
„ Hirjee Dharsi	Do. at Dharavi Road."

No. 2432. *Resolved*: "That the further consideration of memorandum No. 4213, dated 13th ultimo, on the subject of removal of building at Nos. 5-7, Kalbadevi Road, the property of Mr. Narayan Keroba Bhende, be deferred till next meeting."

No. 2433. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 5291, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Considered letter No. 5107, dated 12th instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to state that owing to the unhealthy character of the season at this time of the year, the Health Officer has considered it absolutely necessary to employ the following additional staff (in excess of the schedule number) for a period of two months to keep forward cleaning and for general sanitary work :—

3	Sub-Inspectors at Rs. 30 each per mensem ...	Rs.	90
75	Biggaries, men at „ 9 do. do. ...	„	675
18	Do. women at „ 6 do. do. ...	„	108
70	Carts and bullocks and drivers at Rs. 1-2 per cart per day	„	2,362-8
	Total per month	Rs.	3235-8
	Do. for 2 months...	„	6,549-12

I have the honor to request the sanction of the Standing Committee to the employment of the above extra staff and to the hire of carts and bullocks for a period of 2 months.

The wages of the staff will be met out of savings already effected and to be effected on the scavengering, supervision and labour staff, and the carts and bullocks hire out of the grant for the feed of bullocks, scavengering branch, Health Department Budget. I have been obliged to authorise the employment of this staff in anticipation of sanction.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 2434. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 5107, dated 12th instant, sanction be given to the employment of the following temporary staff and the hire of carts and bullocks for a period of 2 months, from 3rd May 1893, for the Health Department :—

3	Sub-Inspectors at Rs. 30 each	Rs.	90	0	0
75	Biggaris, men at Rs. 9 each	„	675	0	0
18	Do. women at Rs 6 each	„	108	0	0
70	Carts and bullocks with drivers at Re. 1-2-0 per cart per day	„	2,362	8	0
	Total per month ...	Rs.	3 235	8	0
	For two months ...	Rs.	6,549	12	0

"The wages of the staff to be met out of savings already effected and to be effected on the scavengering, supervision and labour staff, and the cost of hiring the carts and bullocks out of the grant for the feed of bullocks, scavengering branch, Health Department Budget."

No. 2435. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 4912, dated 8th instant, sanction be given to the purchase of the following articles from Messrs. Walsh, Lovett, Mitchell & Co., in connection with the maintenance of the Tansa Duct from Tansa to Ghatkopar :—

		Rs.
9	Bogie pipe trucks, one each for siphons Nos. 1, 2, 3, 4, 5 & 8, and 3 for siphon No. 6 at Rs. 400 each	3,600
1	Set diving apparatus	1,000
1	Sledge hammer ...	50
1	Shovel	
2	Small crowbars ...	
14	Spanners	
1	Chain ¾", 30' long ...	
1	Chain ¾", 10' long ...	
1	Large screw coupling ...	
1	Store shed at Kasheli	200
	Total ...	Rs. 4,850

"The cost of the shed, Rs. 200, to be met out of the provision of Rs. 500 sanctioned in the final revised estimate for the purpose of purchase of bungalows from Messrs. Walsh, Lovett, Mitchell & Co., and Rs. 4,650 to be debited to the water works material grant, current year's budget."

Resolved : "That the following be *recorded* :—Letter
No. 2436. No. 5028, dated 9th instant, from the Commissioner, reporting that he has sanctioned the purchase of 7 post hydrants, 1 hose-reel and 2 16″ copper branches, with $\frac{5}{8}$″ nozzles, from Messrs. Merryweather & Sons, of Longacre, London, at a total cost of Rs. 1,279, including packing, freight, &c., charges, the articles being required in connection with the Crawford Market fire service. The cost to be met from the grant of Rs. 4,900 sanctioned by the Corporation for the purpose."

Resolved : "That, as applied for by the Commissioner,
No. 2437. in his letter No. 5031, dated 9th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Bai Gulbai for the recovery of Rs. 16-14-7, being the amount of taxes and notice fee due by her in respect of property, C Ward, No. 2666 (2), 4th Marine Street, for the 2nd half of 1892-93 and the current half of 1893-94."

Resolved: "That the Report of the Health Officer for
No. 2438. the first quarter of 1893 be passed on to the Corporation."

The following notice of motion from Mr. Bhalchandra K. Bhatawadekar was withdrawn by him after the Commissioner had explained the matter to the Committee.

"That the Municipal Commissioner be requested to state if there is any truth in the rumour that a few days ago a dead goat in a state of extreme decomposition was removed from one of the main water pipes in the Girgaum District. That in future, it is desirable that such occurrence should be reported to the Standing Committee as early as practicable after the occurrence."

Resolved : "That the following be referred to the Commis-
No. 2439. sioner for favour of remarks, and that in the meantime the draft statement of accounts prepared by the Accountant-General be printed and circulated to the Committee :—

"Resolution of the Corporation, dated 12th instant, as under :—'That Government letter No. 1467, General Department, dated 27th April 1893, from Mr. Under-Secretary

Harvey, be referred to the Standing Committee for report in consultation with the Municipal Commissioner in accordance with section 123 of the Act.' "

Read letter No. 5276, dated this day, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to request the approval of the Standing Committee to my accepting the tender of Messrs. Walsh, Lovett & Co., the lowest of four tenders received, for the supply of meters at schedule rates aggregating Rs. 7,278-12-0. The amount will be debited to the advance of 2 lakhs for the purchase of water pipes and fittings. Messrs. Walsh, Lovett & Co. mention in their letter submitting the tender that their prices in rupees are calculated in the best rate of exchange quoted on 12th instant for forward delivery, and that, as it appears probable that exchange will improve within the next few months, they have quoted sterling rates for the meters required in case the Standing Committee prefer to take advantage of them. The orders of the Standing Committee are requested.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 2440. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 5276, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Walsh, Lovett & Co., the lowest of four tenders received for the supply of water meters at schedule rates agreggating Rs. 7,278-12-0.

" The amount to be debited to the advance of Rs. 2 lakhs for the purchase of water pipes and fittings.

" That the Standing Committee do not consider it advisable to accept the alternative proposal of Messrs. Walsh, Lovett & Co."

No. 2441. Return of fires at Girgaum Back Road, Lower Colaba, Chinchpoogly (Sataya Narayan Mills), Jail Road, Nepean Sea Road, and Kumbharwada (Dadar), forwarded with the Commissioner's memorandum No. 4623, dated 5th June 1893.*

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 11th June 1893.

* *See* Appendix C. † *See* Appendix B.

Read the following :—

84, HORNBY ROW, BOMBAY, 14*th June* 1893.

TO THE CHAIRMAN AND MEMBERS,
Standing Committee of the Municipal Corporation.

GENTLEMEN,—I beg to send for your inspection the accompanying tumbler of filtered water, as a sample of the water I have been receiving at my house for over a week past. The house I live in, it may be mentioned, is within a stone's throw of the Municipal buildings. You will observe that the water is of a pale yellowish hue. In its unfiltered state, however, the colour is considerably more yellowish. It would be well were the water analysed by some independent analyst. For instance, we have in the body of the Corporation an able analyst in the person of Dr. Deshmookh. The independent testimony of such a gentleman would be of great value. I may as well take the opportunity to inform you that the water I got last week *did* smell abominably. It had a peculiarly offensive stench, something akin to that of a decomposed rat. One night last week little black animalculæ floated in the water. At first I thought they might be owing to the ice dissolved in it. I had my tumbler refilled without the ice and the animalculæ reappeared. I would have refrained from troubling you in this matter, but since so much scepticism was shown at your last meeting, as reported in the papers, touching the condition of the drinking water supplied to the town, I think it my duty as an individual to relate my personal experience—an experience in which, I believe, I am not singular. I am sure that were your Committee to invite the public to state their own experience of the water which has been supplied for some days past, their united testimony would prove to demonstration that the present complaint regarding the *quality* of the water, let alone the irregular and inadequate supply, is not ill-founded.—Yours, &c.,

D. E. WACHA.

No. 2442. *Resolved* : "That Mr. Dinsha E. Wacha's letter, dated this day, be *recorded*, and that he be informed that the analyses of water by the Government Chemical Analyser will be found printed in the Proceedings of this day's meeting, and that owing to gas not being fitted up in the Health Officer's Laboratory, that Officer is unable to analyse water until the necessary fittings are put up for the purpose."

No. 2443. Read and *recorded* the following :—

MEMORANDUM No. 5308 *of* 14*th June* 1893.

The accompanying two reports of the analysis of the Tulsi, Vehar and Tansa waters, received just now from the Chemical Analyser to Government, are forwarded to the Municipal Secretary for the information of the Standing Committee.

H. A. ACWORTH, Commissioner.

No. 653 of 1893.

No. IV.

FROM THE CHEMICAL ANALYSER TO GOVERNMENT,

To H. A. ACWORTH, Esq., C.S.,
Commissioner.

BOMBAY, 14*th June* 1893.

Reporting analysis of three samples of water, referred to in letter No. 5035, dated 9th June 1893.

A. "Unfiltered Vehar water taken from settling basin of the Bhandarwada Reservoir at 9 A.M. on 9th June 1893."

B. "Sample of Tulsi filtered water taken from the distributing tank, Malabar Hill Reservoir, at 8 A.M. on the 9th June 1893."

C. "Sample of Tulsi unfiltered water taken from the inlet well, Malabar Hill Reservoir, at 8 A.M. on the 9th June 1893."

Physical appearances :—

Smell—C smells of sulphuretted hydrogen.

Microscopic examination of suspended matter :—

Sediment scanty in A, rather copious in B and C, consisting of sand, vegetable debris and paramecia in all.

Result of analysis expressed—

	Grains per gallon.		Parts per million.	
	Total solid matter.	Chlorine.	Free ammonia.	Albumenoid ammonia.
A ...	7·00	1·12	·04	·11
B ...	9·80	1·12	·40	·17
C ...	10·50	·98	·66	·25

A is a fair sample of drinking water. B and C are unfit for potable purposes.

T. D. COLLIS BARRY,
F.R.S.E., F.C.S., F.I.C., SURG.-CAPT.,
Chemical Analyser to Government.

No. 655 of 1893.

No. IV.

FROM THE CHEMICAL ANALYSER TO GOVERNMENT,
Bombay,

To H. A. ACWORTH, Esq., C.S.,
Commissioner.

BOMBAY, 14*th June* 1893.

Reporting analysis of sample of water, referred to in letter No. 5108, dated 12th June 1893.

D. "Sample of Vehar filtered water from the Vehar filter."

E. "Sample of water drawn from the 27" Tansa main in Arthur Road at 2-30 P.M. on the 8th June 1893."

Microscopic examination of suspended matter :—

Sediment almost *nil* in D, rather copious in E, consisting of sand, vegetable debris and paramecia.

Result of analysis expressed—

		Grains per gallon.		Parts per million.	
		Total solid matter.	Chlorine.	Free ammonia.	Albumenoid Ammonia.
D	...	5·60	1·12	·03	·05
E	...	9·10	·98	·03	·09

Both fair samples of potable water.

T. D. COLLIS BARRY,
F.R.S.E., F.C.S., F.I.C., SURG.-CAPT.,
Chemical Analyser to Government.

No. 2444. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 5227, dated 13th instant, sanction be given to the work of laying stormwater drains for the space facing the old Municipal Offices and Clive Road Cross Lane to Messrs. Spencer, Mistry, Bhedwar, Vachagandy & Co., in continuation of their contract for the construction of such drains in Dadar Road, Sleater Road, and Chikalwady, at schedule rates.

" The cost to be met out of the grant of Rs. 20,125 sanctioned by the Corporation for the purpose.

" That, under the terms of section 69 (*e*) of the Municipal Act, sanction be given to the variation of the contract of Messrs. Spencer, Mistry, Bhedwar, Vachagandy & Co., whereby the contract time for the completion of the whole work shall be extended to 15th July 1893."

No. 2445. *Resolved*: " That the following be *recorded* :—Letter No. 5228, dated 13th instant, from the Commissioner, reporting the purchase of 200 cast-iron glands and 200 cast-iron clacks for fire hydrants, as required from time to time by the Executive Engineer during the current year, from Messrs. Rustomji Pestonji Master & Co., at the rate of Re. 1-4-0 and Re. 1-8-0, respectively. The total amount—Rs. 550—to be met out of the sanctioned advance of Rs. 2 lakhs for the purchase of Water Work fittings, &c., to be finally adjusted against the Water Works material grant when the articles are used."

In accordance with the request of A. G. Viegas, Esq., at the last meeting of the Committee, the Water Engineer was present, and answered certain questions put by that gentleman and Mr. K. M. Shroff on the subject of the present water-supply.

BOMBAY, 21*st June* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; R. G. OXENHAM, Esq., M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the ACTING SECRETARY.

On the question of the signing of the minutes of the meeting of the 14th instant, Mr. Kaikhosro N. Kabraji called attention to the fact of Mr. Dinshaw E. Wacha's letter, which was read at last meeting, having been printed *in extenso* in the proceedings.

The Chairman remarked that, as the subject of Mr. Wacha's letter was of public importance, he considered it right to include it in the minutes.

The minutes were then signed.

The seal of the Corporation was affixed (1) to deed of agreement between Mr. Lallubhai Mayaram and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property Nos. 138-140, situated at Pinjrapol Road, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 30 per square yard for any land shown on the plan annexed to the deed, to be there taken up, inclusive of any loss, damage, or expense sustained by him by reason of such acquisition; (2) to deed of contract with Messrs. Walsh, Lovett & Co. for the supply of pipes and fittings for water works, at schedule rates; (3) to deed of agreement for the supply of water to the Kurla Municipality; and (4) to ditto with Mr. Noor Mahomed Megji for the lease of 50 square yards of Municipal land near Kurla sluice house for the site of temporary shed for storage of wood for sale.

No. 2657. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 4213, dated 30th ultimo, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of Owner.	Where.
Mr. Narayan Keroba Bhende...	... Building at Nos. 5-7, Kalbadevi Road."

Resolved : "That the further consideration of memo-
No. 2658. randum No. 5340, dated 15th instant, on the subject of removal of building Nos. 225 and 227 at the junction of Musjid Bunder Road and Memon Wada Road, the property of Mr. Harinath Roopjee, be deferred till next meeting."

Resolved : "That, as applied for by the Commissioner,
No. 2659. in his memorandum No. 5844, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Resolved : "That, as applied for by the Commissioner,
No. 2660. in his memorandum No. 5283, dated 14th instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 658-1-11, from savings in the Executive Engineer's Department, general supervision and miscellaneous duties, (*a*) 1 superior staff, (*b*) III, surveyors and draftsmen, to Accounts and Expenditure, audit establishment, section I, establishment, to meet excess due to acting allowance payable to the officers appointed to act for the Chief Accountant while on privilege leave, from 2nd ultimo to 10th instant."

Resolved : "That, as applied for by the Commissioner,
No. 2661. in his letter No. 5614, dated 19th instant, sanction be given, under section 69 (*c*) of the Municipal Act, to the variation of the contract with Mr. Rastamji Nusserwanji Vachagandhi for the work of filling in the Naigam Tank, whereby the contract time shall be extended to 30th April 1893."

Read letter No. 5615, dated 19th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to state that one Mr. Manasukábrama S. Tripathi has made an offer of Rs. 750 for the purchase of the dais and the platform, and I have the honor to request the sanction of the Standing Committee to the offer being accepted if they see no objection to it.—I have, &c., H.A. ACWORTH, Commissioner.

Proposed by Accacio G. Viegas, Esq., seconded by K. M. Shroff, Esq.—

No. 2662. "That the offer be declined as it is inadequate."

Amendment proposed by Kaikhosro N. Kabraji, Esq., seconded by G. W. Roughton, Esq.—

"That the offer be declined."

On a division, the amendment was *lost*, the votes being 5 *for* and 6 *against*.

The original motion was *carried* by 6 votes *against* 5.

Resolved: "That, as applied for by the Commissioner, in his letter No. 5497, dated 16th instant, sanction be given to remuneration being allowed to sub-inspectors, muccadums and workmen, as per statement accompanying the letter, amounting to Rs. 138, in addition to their scheduled salaries for working continuously for 50 hours on the 31st ultimo and 1st and 2nd instant, on the work of connecting the new and old sewers under the engines at the Love Grove Pumping Station. The amount to be met out of the contingency provision for the new engines and pumps at Love Grove."

No. 2663.

Read letter No. 5508, dated 16th instant, from the Commissioner to the Secretary, as under :—

SIR,—It appears that seven years ago, on the occasion of Her Majesty's Jubilee, His Excellency the Governor passed in procession through the Elphinstone Gardens to the Town Hall, and in order to lay the route open, the massive iron pillars, lamp posts and gates on the east and west side of the gardens were removed. There is nothing on record to show by whom or at whose orders they were removed. Presumably, verbal orders were given by the Commissioner to the Executive Engineer or one of his subordinates. The gates were removed to, and are lying at, the A Ward chowki at Mint Road. My attention has been drawn to them by a letter from the Superintendent of Gardens, asking that they may be restored. The gates have been seriously damaged, and cannot be repaired and replaced except at considerable expense. They consisted (at both the east and west entrances) of a large central two-leaved gate, with a smaller one-leaved gate on each side of it. One of the leaves has been so much damaged as to be past repair. The cost of repairing and replacing the gates is estimated by the Executive Engineer at Rs. 2,402. The estimate is herewith forwarded to the Standing Committee for consideration. Messrs. Gahagan & Co. estimate the work to cost Rs. 2,500, and the Ripon Manufacturing Co. at Rs. 2,455. To each of the estimates Rs. 150 have to be added for lamps. The Executive Engineer's estimate is, it will be seen, the lowest.

I think it is advisable that the work should be undertaken, and the Superintendent of Gardens attaches importance to closing the

Gardens at night. It would be possible to repair and re-erect the side gates and provide bars across the central aperture for Rs. 1,200, but then the east and west gates would not be in keeping with those on the north and south.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by E. B. Carroll, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

No. 2664. "That the consideration of the letter No. 5508, dated 16th instant, from the Commissioner, be postponed till next meeting."

Carried.

Read letter No. 5607, dated 17th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to the resolutions of the Corporation and Standing Committee, Nos. $\frac{7713}{24\text{-}10\text{-}92}$ and $\frac{7743}{26\text{-}10\text{-}92}$, I have the honor to report that the Executive Engineer considers Merrywether's small size "Valliant" steam pumping engine suitable for flushing gullies, and recommends the purchase of one such engine for the purpose. The initial cost of this engine, capable of delivering 80 gallons per minute and of discharging an effective jet to a height of 60 to 100 feet, fixed complete on a wrought-iron carriage to be drawn by two bullocks and provided with bunker to carry 5 cwts. of coal, is Rs. 5,000. The monthly cost of working and maintenance will be Rs. 243 as detailed below :—

	Rs.
Coal at 4½ cwt. per day of 8 hours	112
1 Driver at Rs. 40 per month	40
Hire of 2 bullocks with driver	29
1 Mukadam at Rs. 15 per month	15
2 Coolies at Rs. 10 each	20
Repairs to engine per month	5
	221
Add—10 per cent. contingencies	22
Total Rs.	243

or Rs. 2,916 per annum; total Rs. 7,916. This amount can be paid, with the sanction of the Corporation, out of the surplus of 4½ lakhs which has accrued since the publication of the revised estimates for the year 1892-93. Out of the above surplus, the payment of Rs. 31,187 has been sanctioned by the Corporation up to date.

As regards the probable length and number of gullies which the engine would flush daily, it is not possible to ascertain the lengths

of gullies that could be flushed by this engine. This would depend on the length and width of each individual gully and their distance one from the other; but from experiments made by the Health Officer, it seems probable that from 25 to 30 gullies can be flushed daily.

With reference to the question of the provision of automatic flushers at the head of gullies, the only objection to it is that it would cause a very large consumption of water—certainly more than 2,000,000 gallons a day in the sewered districts alone. The Water Engineer would, but for this objection, prefer automatic gully flushers to flushing by hose, because in the former case the water can be taken gradually. It is for the Corporation to consider which expedient it is preferable to adopt or whether both together are advisable.

Automatic flushers in the sewered districts alone will consume more than 2,000,000 gallons of water a day, and it is probably not absolutely necessary that every gully should be flushed every day. On the other hand, the engine will not flush more than 30 gullies a day, and will of course choose the worst gullies in the worst districts. It is idle to expect that all the gullies in the sewered districts of the city can be properly flushed by one engine, as it would take 200 days to get round them at the rate of 30 a day. I am inclined to think both systems should be combined, that a certain number of automatic flushers should be erected in selected districts, and that the engine which the Health Officer requires should be furnished to him for use at discretion in quarters which from time to time require it, and which are not served by automatic flushers. The latter will only cost Rs. 90 each, and the Corporation might sanction a sum of Rs. 1,000 from surplus cash balance for the purchase of a small number.—I have, &c., H. A. ACWORTH, Commissioner.

No. 2665. *Resolved*: "That letter No. 5607, dated 17th instant, from the Commissioner, be forwarded to the Corporation with reference to their resolution No. 7713, dated 24th October 1892.

"That the Corporation be recommended to sanction the sum of Rs. 5,000 for the purchase of one of Merrywether's small size 'Valliant' steam pumping engines, and Rs. 243, the estimated monthly charge for working and maintaining the engine. The amount to be met from the surplus of about Rs. 4½ lakhs which has accrued since the publication of the revised estimates for 1892-93.

"That the Corporation be further recommended to sanction the payment of Rs. 1,000, from the same grant, for the purchase of automatic flushers to be erected in certain districts for the purpose of flushing gullies and sewers."

Read letter No. 5616, dated 19th instant, from the Commissioner to the Secretary, as under :—

SIR,—The Corporation have in their resolutions quoted in the margin from time to time sanctioned sums totalling Rs. 4,80,000 for the purchase, erection, &c., of new boilers, engines and pumps at Love Grove. Rs. 4,40,000 have been sanctioned to be met by a loan and Rs. 40,000 out of the sale-proceeds of old engines, boilers and pumps, two centrifugal pumps and the materials of the old pumping station. A revised estimate is herewith submitted, which shows that the total expenditure cannot fall short of Rs. 4,91,097-11-4, showing an excess of Rs. 11,097-11-4. The excess is accounted for under the head of contingencies in the revised estimate, though the Drainage Engineer expresses a doubt whether the cost of erection was not inadvertently omitted from Mr. Walton's original estimates, and, if so, this would amply account for the excess. I believe, however, that the contingent grant of Rs. 30,391 included in the original sanction of 4 lakhs did include the cost of erection. The extra contingencies in the revised estimate include the cost of a temporary shed, of a puddle dam, &c., in the condensing tank, and also a sum of Rs. 7,661-6-8 on account of two cast-iron staircases, stores needed for erection, and the cost (Rs. 1,000) of raising the road at Love Grove occasioned by taking the outfall across the road. The excess is also partly due to the works undertaken a short time ago when the sewer connection to the new pumps was effected. All these are works of absolute necessity.

No. 6435 of	8·9·91	Rs. 4,00,000
„ 3317 of	4·7·92	„ 40,000
„ 7349 of	13·10·92	„ 40,000
		Rs. 4,80,000

In a separate statement attached is shown an estimate of Rs. 9,850 for (*a*) the cost of an economizer, (*b*) a penstock to the catchpit, (*c*) rails from the old boiler house to the new one. The economizer will be a valuable addition to the plant and, by reducing the coal consumption, is expected to repay its cost in 12 months.

The penstock is needed to shut off the sewer from the catchpit when the sumps have to be entered for repairs. It is proposed to use the old boiler house in future for the storage of coal in the monsoon and the rails are necessary to run the coal trucks to the new boiler house. The Executive Engineer concurs with the Drainage Engineer in considering these works to be necessary. The total excess over the sanctioned grant will be Rs. 11,098+Rs. 9,850, or Rs. 20,948, and to this I request the sanction of the Corporation.

The Drainage Engineer has requested early sanction to the items of Rs. 680 for two cast-iron staircases and Rs. 1,000 for raising the road, and it may be necessary that I should accord sanction in anticipation of sanction by the Corporation to the revised estimates.—I have, &c., H. A. ACWORTH, Commissioner.

Original Estimate for Love Grove Pumping Engines.

Particulars.				Amount.		
				Rs.	a.	p.
Cost of engines, £23,960 at 1s. 5d.				3,38,259	0	0
Increased charges for machinery consequent on fall of exchange (Corporation Resolution No. 7049, dated 13th October 1892) ...				40,000	0	0
Masonry foundations of engines and fixing the same	Rs.	31,350	0 0			
Contingencies and staff	,,	30,391	0 0			
				61,741	0	0
Cost of erecting a new engine and boiler house (Corporation Resolution No. 3317 of 4th July 1892)				40,000	0	0
				4,80,000	0	0

Revised Estimate for the New Works at Love Grove.

Particulars.				Amount.		
				Rs.	a.	p.
Contract for the construction of the engine house, &c., and the foundation of the engines below 78·50 T.H.D.				57,887	0	0
Contract for the foundations of engines above 78·50 T.H.D. and of the foundations of boilers				13,751	0	0
Cost of engines £23,960 (with exchange), cost of £21,564 already remitted	Rs.	3,36,039	11 4			
Cost of £2,396 to be remitted, estimated at Rs. 17 per £	,,	40,732	0 0			
				3,76,771	11	4
Cost of land				1,500	0	0
Cost of landing and carting machinery				2,363	0	0
Staff for the work				3,720	0	0
Contract for erection of machinery at Rs. 35 per ton	Rs.	14,000	0 0			
Contingencies	,,	2,380	0 0			
Pay and travelling expenses of the Chief Erector	,,	5,130	0 0			
Allowance for 3 months' maintenance	,,	2,295	0 0			
				23,805	0	0
Contingencies.						
Temporary shed for the machinery	Rs.	616	11 2			
Puddle dam in the condensing tank and lengthening and removing and refixing suction pipes.	,,	1,668	6 7			
Sundry charges already incurred	,,	1,353	7 7			
Probable amount required in future	,,	7,661	6 8			
				11,300	0	0
				4,91,097	11	4.

Statement of Extra Works in connection with the New Works at Love Grove.

	Particulars.	Amount.		
		Rs.	a.	p.
1	Penstock to catchpit as per Messrs. Geo. Gahagan & Co.'s estimate	3,600	0	0
2	Cost of an economizer, fixed complete	5,250	0	0
3	Extension of rails from the old to the new boiler house with a new turntable	1,000	0	0
	Total Rs.... ...	9,850	0	0

Resolved : "That the consideration of the Commissioner's
No. 2666. letter No. 5616 of 19th instant be deferred till next meeting and that the papers be printed in the minutes of to-day's meeting, and circulated to the members as soon as possible."

Resolved : "That the following be laid on the table :—
No. 2667. Letter, dated 16th instant, from Messrs. Ardaseer Framjee Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of May last and compared them with the general and subsidiary ledgers and journals, and found them correct. Forwarding summary and statement of their scrutiny of accounts."

In accordance with notice, it was—

Proposed by G. W. Roughton, Esq.—

No. 2668. "That the Municipal Commissioner be requested to inform the Standing Committee—

"1. To what cause the constant failures of the seaface of the Walkeshwar Road at the foot of the Malabar Hill are due ?

"2. What is the expense that has been incurred in each of the last five years respectively in repairing such seaface at the spot before mentioned ?

"3. Would the probabilities of any further damage being incurred be removed or lessened by taking up the necessary land to carry the road further inland ?

"4. If so, what would be the probable cost of so doing ?"

The motion was seconded by G. Geary, Esq., and *carried*.

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 18th June 1893.

Resolved : "That, as applied for by the Commissioner, in
No. 2669. his letter No. 5779, dated 19th instant, and under the circumstances reported therein, sanction be given to the employment of Mr. Purshotum Balkrishna Joshi as Superintendent, Assessment Department, on a salary of Rs. 150 per mensem. The special reasons for appointing him are, that he will not contribute to the

* *See* Appendix B.

Pension Fund, and that he is well fitted, from ability, energy and integrity, to add strength to the Assessment Department."

No. 2670. *Resolved*: "That the following be *recorded*:—Letter No. 5772, dated 20th instant, from the Commissioner, reporting, under section 69 (*d*) of the Municipal Act, that he has entrusted the work of the design prepared by Mr. Gostling in connection with the experimental house connection works to one Gokul Tikam at a total cost of Rs. 791-14-0. The amount to be met out of the grant of Rs. 10,000 sanctioned by the Corporation for experimental house connection works."

No. 2671. Mr. Grattan Geary called the attention of the Commissioner to the apparent inadequacy of the storm-water drains in the Fort and Malabar Hill districts.

Considered list of outstanding business, 1st June 1893:—

No. 2672. *Item No.* 1.—Resolution of the Corporation, No. 7713, dated 24th October 1892, as under :—"That the proposal for purchase of a steam-engine for flushing sewers be referred back to the Standing Committee for report as to the size, capacity, and cost of the engine and of the staff for working it, also as to the probable length and number of gullies which the engines would flush daily. That the Commissioner be asked to report as to the feasibility of providing automatic flushers at the head of gullies." Referred to the Commissioner for remarks (26th October 1892).

Struck out, the report having been this day presented and disposed of.

BOMBAY, 28*th June* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
BALCHANDRA KRISHNA BHATAWADEKAR, Esq., L. M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the ACTING SECRETARY.

The minutes of the meeting held on the 21st instant, were signed.

The seal of the Corporation was affixed (1) to deed of conveyance (in duplicate) between Khan Bahadur Jam-

setjee Dhanjibhoy Wadia and the Corporation, in respect of the land at Sion for Tansa pipe line; (2) to deed of contract with Mr. Sayaji Nagooji for the work of filling in a portion of the Babula Tank at Umarkhadi; (3) to deed of contract with Messrs. Bulkley & Co. for works in pipe sewers, manholes, automatic flushing tanks and metal vent-shafts in and for the Colaba District; and (4) to deed of contract with the Gas Company for an extension of their agreement for one year for lighting the streets of the City with gas.

No. 3031. *Resolved*: "That, as applied for by the Commissioner, in his memoranda Nos. 5340 and 5816, dated 15th and 21st instant, and Nos. 5987 to 5990, dated 23rd idem, and No. 6124, dated 24th idem, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Harinath Roopjee	Building at Nos. 225-227 at the junction of Musjid Bunder Road and Memonwada Road.
„ Baramul Nathooram Rupjee ...	Building at Girgam Back Road.
Bai Durgabai, widow of Raghoba Peethajee.	„ at No. 49, Dhuswadi, 4th Marine Lane.
Mr. Kanjee Parvat	„ at Girgam Back Road.
Bai Luxmibai, widow of the late Mr. V. J. Shunkersett	„ at Tardeo Road.
Mr. Kanjee Parvat	„ at Girgam Back Road.
Do.	„ Do. "

No. 3032. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 6396, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 3033. *Resolved*: "That the following be *recorded* :—Letter No. 5947, dated 22nd instant, from the Commissioner, reporting that he has sold the right of cultivating a portion of the Purdan Tank at Haines Road, lately reclaimed, to one Gangaram Vithooram for Rs. 110 for one year from 1st proximo."*

No. 3034. *Resolved*: "That the following be *recorded* :—Letter No. 6251, dated 26th instant, from the Commissioner, reporting that he has accepted the

* The right has been sold for the first time this year.

offer of Messrs. Dadabhai Hormusjee & Co., for the supply of 270 tons of Duffryn Cardiff coal at Rs. 16-8-0 per ton, delivered at the Municipal Workshops."

No. 3035. *Resolved* : "That the following be *recorded* :—Letter No. 6012, dated 23rd instant, from the Commissioner, reporting that he has sold the right of catching fish and for growing vegetables in Jamblee and Sawllee Tanks at Mahim, to one Ganpat Sakoo for Rs. 30 for one year."*

No. 3036. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6229, dated 26th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of Messrs. Pallonji S. Mistri & Co.'s contract, for the construction of the Foras Road Market, whereby the contract time shall be extended for a period of two months, from the 10th idem."

No. 3037. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 6196, dated 26th instant, sanction be given to the transfer of Rs. 300, from savings in Conservancy Branch, 3, disposal of town sweepings, earth to cover kutchra deposits, to Conservancy Branch, X, Repairs, Health Department Budget, to meet excess on the latter head."

No. 3038. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 6197, dated 26th instant, sanction be given to the transfer of Rs. 440-13-9, from savings in Health Department Budget, Conservancy Branch, section III, disposal of town sweepings, to Markets and Slaughter Houses, section I, superintendence, to meet acting allowance payable during the absence of Mr. Higgins on privilege leave."

No. 3039. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 6257, dated 27th instant, sanction be given, under the Pension Regulations, to a monthly pension of Rs. 35-6-8, being paid to Mr. Dadabhoy Bapooji, Assistant Pay Clerk, Chief Accountant's Office, from 1st April last.

"The amount to be met, from the grant for pensions and gratuities, current year's budget."

* The right realized the same amount last year.

Resolved: "That, with reference to letter No. 6221, dated 26th instant, from the Commissioner, to the Secretary, sanction be given, under section 69 (*e*) of the Municipal Act, to a variation of the contract with Messrs. Killick, Nixon & Co., whereby the quantity of Davison's West Hartly coal supplied by them under the resolution of the Committee, No. 10083, dated 4th January last, be increased by 11 cwts. 1 qr. 25 lbs."

No. 3040.

Considered again letter No. 5508, dated 16th instant, from the Commissioner, on the subject of the re-erection of the gates of the Elphinstone Circle Gardens.

Proposed by E. B. Carroll, Esq., seconded by A. G. Viegas, Esq.—

"That the Commissioner be requested to ascertain, if possible, from the original makers of the gates whether they are in a position to supply the required portions and at what cost delivered in Bombay."

No. 3041.

Carried.

Considered again letter No. 5616, dated 19th instant, from the Commissioner, on the subject of excesses in the cost of the erection of engines, &c., at Love Grove.

Proposed by Bhalchandra K. Bhatawadekar, Esq., seconded by Javerilal U. Yajnik, Esq.—

"1. That letter No. 5616, dated 19th instant, from the Commissioner be forwarded to the Corporation, with a recommendation that sanction be given to the excess of Rs. 11,097-11-4, on account of the cost of erection, &c., of the new boilers, engines and pumps at the Love Grove Pumping Station, and Rs. 9,850, for the cost (*a*) of an economizer, (*b*) a penstock to the catch-pit, and (*c*) rails from the old boiler house to the new one. The total sum, Rs. 20,948, to be included in the loan for the purchase, erection, &c., of the new boilers, engines and pumps at Love Grove.

"2. That the Standing Committee regret that the excesses should not have been foreseen."

Amendment proposed by E. B. Carroll, Esq., seconded by Hurkisondas Nurrotumdas, Esq.—

"That the last para. of the motion be omitted."

No. 3042.

On a division, the amendment was *carried* as a substantive motion by 6 votes *against* 5, and the original motion, as thus amended, was *carried* as follows:—

"That letter No. 5616, dated 19th instant, from the Commissioner be forwarded to the Corporation, with a recommendation that sanction be given to the excess of Rs. 11,097-11-4, on account of the cost of erection, &c., of the new boilers, engines and pumps at the Love Grove Pumping Station, and Rs. 9,850, for the cost (*a*) of an economizer, (*b*) a penstock to the catch-pit, and (*c*) rails from the old boiler house to the new one. The total sum, Rs. 20,948, to be included in the loan for the purchase, erection, &c., of the new boilers, engines and pumps at Love Grove."

Read letter No. 6138, dated 24th June 1893, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to request sanction of the Standing Committee, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the High Court against Mr. Govindjee Thakersey Moolji and others, the owners of the Moolji Jetha Cloth Market, C Ward, No. 252, and other properties in the neighbourhood of and adjoining the Cloth Market, as per enclosed list, for recovery of property taxes amounting to Rs. 36,743-9-11 as shown in the list. The recovery of the bills was deferred, pending the decision by the High Court on the reference in the appeal against Halalkhor and Water Taxes filed by the executors of the will of the late Sir Mangaldas Nathoobhoy. The appeal against the Water Tax was dismissed by the Small Causes Court, and the reference as regards Halalkhor Tax has recently been decided by the High Court in favour of the Municipality. The bills were duly presented to Mr. Govindjee Thakersey Mooljee, and since then the Municipal Solicitors addressed him on the subject, asking for payment; but as no payment has yet been made the Solicitors advise a suit being filed.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. Fazulbhoy Visram—

No. 3043. "That the consideration of the Commissioner's letter No. 6138 of 24th instant be deferred, and that the Municipal Commissioner be asked to ascertain the opinion of the Municipal Solicitors whether any portion of the claim will be foregone if proceedings are taken by suit instead of by distraint."

Carried.

No. 3044. The consideration of the following was deferred till the next meeting in order to enable the Commissioner to ascertain whether the trustee, Mr. M. M. D'Souza,

receives the rents of the property in question:—Letter No. 6297, dated 27th instant, from the Commissioner, requesting sanction, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed against Mr. M. M. D'Souza, Trustee to Anna Maria Tesira, for the recovery of property taxes and notice and warrant fees, amounting to Rs. 457-11-5. Stating that the properties are for the most part vacant and the owner has no effects in her possession worth distraining.

Resolved : "That the following be *recorded* :—Letter No. 6250, dated 26th instant, from the Commissioner, reporting, with reference to the provision of Rs. 600, for providing telephonic communications in the A, C and E Ward offices of the Engineer's Department, that it is unnecessary to provide the C Ward office with a telephone, as the people of the Engineer's Department can utilise the instrument put up in the Health Department Stable, which is in close proximity to the C Ward office, and that, in lieu thereof, a telephone has been ordered to be put up at the residence of the Executive Engineer."

No. 3045.

The following return was read and *recorded* :—

Return of fires at Lady Jamsetjee Road (The Bombay Woollen Manufacturing Co.), Hornby Road, and Tardeo Road (Jivraj Balloo Spinning and Weaving Mill, forwarded with the Commissioner's memorandum No. 5842, dated 21st June 1893.*

No. 3046.

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 25th June 1893.

The Commissioner said, with reference to an enquiry made at the meeting before last, that proposals for filters at Malabar Hill Reservoir were among other proposals for improvements to the water-supply before the Standing Committee and Corporation four years ago, but that the proposals for filters were not adopted. He added that the additional filters would cost about two lakhs of rupees; that the subject had been recently discussed between himself, the Executive Engineer and the Water Engineer and a report from him would be shortly before the Standing Committee.

No. 3047.

* *See* Appendix C. † *See* Appendix B.

BOMBAY, *5th July* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the meeting held on the 28th ultimo, were signed.

The seal of the Corporation was affixed (1) to deed of contract with Messrs. Walsh, Lovett & Co., for the supply of meters, for Water Works ; and (2) ditto, with Messrs. Dadabhai Hormusjee & Co., for the supply of 270 tons Duffryn Cardiff coal.

The seal was also affixed (1) to one attested duplicate debenture of the Tansa Water Works Loan, No. 9633-34, of Rs. 1,000 ; and (2) to 11 attested duplicate debentures of the Municipal Sanitary Works Loan, Nos. 1966 N.N. to 1970 N.N., of Rs. 500 each.

No. 3103. *Resolved* : " That, as applied for by the Commissioner, in his memoranda Nos. 6544 and 6545, dated 30th ultimo, and Nos. 6652 and 6653, dated 1st instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Kanjee Parvat	...Building at Girgam Back Road.
„ Dadoba Bhasker	„ at Worli Road.
„ Deoji Valji	„ at the junction of Frere Road and Rajapur Street.
„ Balu Laxuman Jadhow	„ at No. 28, Zaoba's Oart."

No. 3104. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 6933, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 3105. *Resolved* : " That the following be *recorded*:—(1) Letter No. 6138, dated 24th ultimo, from the Commissioner, requesting sanction to the filing of a suit in the High Court, against Mr. Govindjee Thakersey Muljee and others, for the recovery of property taxes in respect of the Muljee Jetha Cloth Market in Sheik Memon Street, amounting to Rs. 36,743-9-11.

"2. Memorandum No. 6574, dated 30th idem, from the Commissioner, forwarding Solicitor's opinion, stating that no portion of the claim against the parties is barred by limitation, and that the case is rather one for a suit under section 12 of the Municipal Act, than for distress warrant under section 203.

"3. Letter No. 6759*a*, dated 3rd instant, from the Commissioner, stating that Messrs. Thakersey Mulji, Sons & Co. have this day, forwarded a cheque for Rs. 36,743-9-11, the amount due by them. The sanction to file a suit will not, therefore, be necessary."

No. 3106. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6297, dated 27th ultimo, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed against Mr. M. M. D'Souza, trustee to Anna Maria Tesira, for the recovery of property taxes and notice and warrant fees, in respect of Ward No. 6783, Police Hospital Lane, and Ward Nos. 6792, 6793 (1) and 6793 (2), Dolkar Street, E. Ward, amounting to Rs. 457-11-5."

No. 3107. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6590, dated 30th ultimo, sanction be given to the transfer of Rs. 495, from savings in the Health Department Budget, Conservancy Branch, Section 2, Labour, B, surface drain cleaning, to the Corporation and Standing Committee Establishment, salary of the Municipal Secretary, to meet acting allowances payable to officers and others during the absence of Mr. Barrow on privilege leave.

That sanction be also given to an acting allowance of Rs. 25 per mensem being paid to Mr. Inspector Dawes for doing the work of Inspector, G Ward, in addition to his own duties. The amount to be met out of the said transfer."

No. 3108. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 6640, dated 1st instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 738-7-6, from savings in the Health Department Budget, Conservancy Branch, A. 1, superintendence and inspection, C. II, Labour, B, Drain cleaning, C—X, Halalkhor Branch, A, Superintendence, to

same head, II, Labour, A, scavengering, to meet the amount of scavengering charges payable to the Tramway Company."

No. 3109. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 6672, dated 1st instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 2,092-8-0, from savings in the Health Department Budget, Conservancy Branch, 10, Halalkhor Branch, C, feed of bullocks, to same head, 2, Labour; A, scavengering, feed of bullocks, to meet excess owing to 30 extra carts being engaged on account of special sanitary work in connection with the unhealthy state of the City."

No. 3110. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6768, dated 3rd instant, sanction be given to the payment of Rs. 25-2-7, to Akbar Mia, foreman, 8-ton steam roller No. 19, being the amount of wages, from the 27th March to the 16th May 1893, during which time he was in the hospital for injury sustained to the thumb of his right hand while in the execution of his duty."

Read letter No. 6626, dated 30th ultimo, from the Commissioner, to the Secretary, as under :—

"SIR,—With reference to Corporation resolution No. 2622 of 19th instant, I have the honor to annex copy of a memorandum No. 5962 of 22nd idem, under which I despatched it to the Superintendent of Gardens and of his reply. It will be observed that he requests permission to absent himself on duty for the purpose of visiting the zoological collection at Calcutta, Karachi, and Jeypore. It is known to me that there is a good collection at Calcutta and at Karachi, and if there is one at Jeypore, it should not be passed over. In my opinion, it is absolutely necessary that some competent officer should pay these visits, and as my duties will not admit of my doing so myself, the Superintendent of Gardens is the proper person. I think the Corporation should sanction the proposal and that the Superintendent's actual travelling expenses should be paid and an allowance of Rs. 5 a day be granted to him. His absence should not exceed three weeks or a month.—I have, &c., H. A. ACWORTH, Commissioner.

No. 5962 OF 1893-94.

BOMBAY, 22*nd June* 1893.

The Corporation resolution No. 2622, dated 19th June 1893.

Copy forwarded to the Superintendent of Gardens for report.

He should obtain and submit a list of animals kept in the zoological collections at Calcutta and Karachi, and submit a complete scheme for the establishment of a similar collection in

Bombay, either at the Victoria Gardens, if there is space for it, or elsewhere, with estimates of cost of acquiring (if necessary) and laying out the ground, of cages with drainage and water-supply, and of up-keep, including feed, establishment, and all heads of maintenance.

If a zoological collection on a scale of those in London, Calcutta or Karachi is to be established in Bombay, the Commissioner has great doubts whether space will admit of its being in the Victoria Gardens.

The Commissioner also inclines to suspect that the climate of Bombay is so unsuitable for wild animals as to render a zoological collection on an extensive scale very difficult.

The Superintendent's report of the 5th June is returned. details may be embodied in the report now called for.—H. A. ACWORTH, Commissioner.

No. 376 OF 1893-94.

BOMBAY, *24th June* 1893.

TO THE MUNICIPAL COMMISSIONER.

SIR,—With reference to your No. 5962 of 22nd June 1893, I have the honor to inform you that I was writing letters to the Superintendents of Calcutta and Karachi Zoological Gardens, and also to the Superintendent of the Jeypore Gardens, where, I am informed, there is a good zoological collection, requesting them to send a list of animals in their collection, with information about the arrangements made for their accommodation and maintenance. But I beg to suggest that, in order to enable me to draw up a complete scheme, it is necessary for me to visit these places in order to get full information about the accommodation, feed and maintenance of the animals.

If the Commissioner will sanction this proposal, I shall start at once and return as soon as possible.—I have, &c., C. D. MAHALUXMIVALA, Superintendent, Municipal Gardens.

No. 3111. *Resolved* : "That letter No. 6626, dated 30th ultimo, from the Commissioner, be forwarded to the Corporation, with reference to their resolution No. 2622, dated 19th June 1893.

"That the Corporation be recommended to sanction the proposal of permitting the Superintendent of Gardens to visit the zoological collections at Calcutta, Karachi and Jeypore, for the purpose of enabling him to submit a complete scheme for the establishment of a similar collection in Bombay.

"That the Superintendent's first class steamer and second class railway expenses be paid, and that an allowance of Rs. 5 a day be granted to him."

No. 3112. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6687, dated 1st instant, sanction be given, under section 230 of the Munici-

pal Act, to an order in writing being given to Karva Kanji Soma, owner of premises No. 15, Falkland Road Cross Lane, authorizing him to lay a drain for his premises into, through or under the adjacent house gully belonging, or alleged to belong, to Bai Mariambai, to the Municipal drain at Falkland Road."

Considered the following :—

No. 6463 OF 1893-94.

BOMBAY, 29*th June* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—I have the honor to address the Standing Committee and the Corporation on the subject of the so-called mutton market at DeLisle Road, which is urgently in need of attention if the pecuniary interests and the policy of the Municipality are to be preserved.

2. When the slaughter-houses at Bandora were first established, a concession was, in the interests of the community, granted to a small number (about 30) of phudkaries, which permitted them to sell within the city for slaughter within the city a specified daily number of sheep and goats. The object was to enable citizens—principally Hindu citizens—who might require mutton for religious ceremonies, wedding festivals and the like to obtain it without going to Bandora and to slaughter it on their premises. This inter-urban mutton market was at first established on the Esplanade. It was afterwards removed to Byculla and finally (by Mr. Pedder) to DeLisle Road, where it at present exists. There has been no period of its existence, as I believe, at which it has not been looked on as an unqualified nuisance by the Superintendent of Markets, and I also believe that every Municipal Commissioner has disapproved of it and would have been glad to abolish it—an opinion in which I fully share, believing, as I do, that there is no real necessity for it at all, and knowing that it is the cause of serious abuses. Better meat can be obtained either at Bandora or at the market as cheaply and as easily as at DeLisle Road, and I have no reason to suppose, but quite the contrary, that the purpose for which this market was originally permitted is the purpose which it now serves.

3. There are at the present moment 68 licensed phudkaries. They pay Rs. 25 a year for their licenses, and they are allowed each of them to take three sheep or goats a day from the Bandora slaughter-houses for which they pay the slaughter fee of eight annas per head so removed. There is no municipal establishment at DeLisle Road. The so-called market is simply a strip of open land by the roadside, which in times of heavy rain is a mass of mud and water. There is no security against the sale there of any number of sheep and goats beyond the authorized quantity either by licensed or unlicensed persons, and we know with practical certainty that numbers

of sheep and goats are brought in from Coorla which have never passed the slaughter-houses at all ; that numbers of sheep and goats which have been rejected at the slaughter-houses as unfit for human food are sold at DeLisle Road ; that the licensed phudkaries habitually sell more than they are authorized to sell by their licenses; that numbers of unlicensed persons carry on a similar trade there; and that the slaughter without permit of sheep and goats upon the spot by kamatries or butchers, licensed or otherwise, is a common practice. All these infractions of the law go on without any control, except such as a casual visit by the Superintendent of Markets or his subordinates is able to afford, and thus the municipal revenue suffers, and, what is a much more serious thing, the law and policy which prohibit the sale and slaughter of meat within the city, except under license, is set at naught. The people who carry on their business at DeLisle Road—and the remark applies to phudkaries, whether licensed or not, as well as to kamatries—are a most lawless set, and the intervention of municipal officers is constantly met with opposition and violence. In addition to what I have already remarked on, there is strong reason to believe that collusion exists between the phudkaries and some of the dubashes supplying ships in port, by which the latter requisition double or treble the number of sheep or goats which they really require and dispose of the surplus to the phudkaries, who thus escape the eight-anna slaughter fee, supplies required for shipping not being charged with it. Thus all parties are interested in maintaining the present state of things, the licensed phudkaries, whose interest one would have expected to lead them to reporting and expelling unlicensed phudkaries, having so many illegitimate sources of profit themselves that it is worth their while to acquiesce in illegalities committed by other people.

4. The Municipality has now two alternatives before it—either to abolish this market altogether or to bring it under proper control. My distinct opinion is that it ought to be abolished. It was in the first instance allowed as a concession at a time when the slaughter-houses were unpopular, and it would have been dangerous not to allow it, but the difficulties which then prevailed have completely disappeared. I have no doubt whatever that the purpose for which the market was originally allowed, *viz.*, to serve occasions of ceremonial, is now amply met by the slaughter-houses and the meat markets of the Municipality, and in fact this is not the service now performed by the market at all. People who require meat, whether alive or dead, for special occasions obtain it from the usual quarter, and the DeLisle Road market is simply a half-legitimate and, as regards its original purpose, a wholly illegitimate annex to the slaughter-houses and markets of the Municipality. My opinion, therefore, is that the *raison d'être* of its existence no longer obtains and that it ought on that account, if for no other, to be done away with.

5. If, however, the Corporation hesitate to take so drastic a step as this, then the necessity will arise, in which they cannot fail to

agree with me, for putting the market on a proper basis and under proper control, so that no one shall carry on business there without a license, that the licensees shall be confined to their legitimate number of animals, and that the indiscriminate slaughtering which now goes on shall be stopped and measures taken to prescribe in every case the exact place of slaughter of every animal and to provide that the orders shall be observed. The first thing to be done is to enclose the market, and that not by a fence which may be climbed over or crept through, but by a solid wall. Next, every phudkari must have his proper stall and do business there only. Then two clerks must be provided—one at the entrance and another at the exit gate (there should be these two gates and no more); the former to register the names of the importing phudkaris and the number of animals daily brought in by them, and the other to keep a countercheck by registration, of the animals taken out, the name of the phudkari who has sold them, the name, address, &c., of the purchaser and the place for which a slaughter permit is issued. There must be an adequate force of peons to keep order—a most important precaution, and over all there should be an Inspector on Rs. 75 or 80 a month to have general charge and superintendence of the markets under the Superintendent of Markets. The phudkaries should no longer pay a license fee of Rs. 25 a year, but the stalls should be put up to auction in the regular way. They will then pay, in addition, the slaughter-house fee at Bandora and, on passing the clerk at the entrance gate, they must produce a receipt for the fee from the slaughter-house. All this will cause expense, but it will be far more than made up by the stoppage which will be thereby put to the lawless importation of animals which it is now impossible to prevent, and a collateral and more important advantage will be secured by thus obviating the possibility of sale at DeLisle Road of animals which have not been examined by the Inspectors at the slaughter-houses and of animals which have been examined and rejected as unfit for food.

6. I annex estimates of the capital and recurring expenditure which will have to be incurred, and which, I assure, the Corporation is the least which ought to be provided if due regard is had to the necessities of the case and the discontinuance of a crying evil and nuisance. I beg to add that I propose, subject to any views which may be expressed by the Corporation on the subject, to limit the number of stalls to fifty, which is the outside number which ought to be allowed. Perhaps it will be as well that I should mention in support of what I have said that I received offers this year for farming the phudkaries' fees far in excess of what we realize from them—a conclusive indication of the extent to which we are defrauded.—I have, &c.,

H. A. ACWORTH, Commissioner.

Capital Expenditure.

	Rs.
Filling in	1,433
Metalling	546
Enclosure wall	3,260
50 stalls, iron-barred	3,514
Roofing	3,506
Chowkey with 2 eating rooms	1,231
Latrine	965
Water tank and stand-pipe	570
Drainage	975
Total Rs. ...	16,000

Recurring Expenditure.

	Rs.	
1 Inspector	75	
2 Clerks on Rs. 30 each	60	
1 Havildar	12	
3 Peons on Rs. 10 each	30	
3 „ „ 9 „	27	
Contingencies	10	
Total Rs. ...	214	per mensem.
or Rs. 2,568 per annum.		
Net contra-revenue, 150 sheep or goats per diem, at 8 annas each	27,375	per annum.
Rent of stalls (approximately), at Rs. 50 per annum each	2,500	„ „
Total Rs.	29,875	„ „

No. 3113. *Resolved*: "That, with reference to the Commissioner's letter No. 6463 of 29th June 1893, the Standing Committee is of opinion that it is very evident some change must be effected in the existing system for the purchase and sale of goats and sheep within the City limits for ceremonial and other purposes. When the Committee is in possession of the views of the Corporation on the subject, it will be prepared to recommend such financial provisions as may be necessary."

No. 3114. *Resolved*: "That the following be *recorded*:—Letter No. 6731, dated 3rd instant, from the Commissioner, reporting that he has sold the right of chickoo and backoolee crops of the Victoria Gardens to one Ganoo Tookaram till the end of March 1894 for Rs. 50."*

* Last year the right realized Rs. 90.

Considered memorandum No. 6432, dated 28th ultimo, from the Commissioner, on Government Resolution No. 1246, General Department, dated 11th April 1893, passed on the Municipal Commissioner's Administration Report for 1891-92.

No. 3115. *Resolved* : "That the following Sub-Committee be appointed to report on the Municipal Commissioner's memorandum No. 6432, of 28th June 1893 :—The Hon'ble Mr. Fazulbhoy Visram, Javerilal U. Yâjnik, Esq., G. W. Roughton, Esq., and K. M. Shroff, Esq."

No. 3116. *Resolved* : "That the following be *recorded* :—Memorandum No. 6547, dated 30th ultimo, from the Commissioner, reporting, with reference to the Standing Committee's resolution No. 4484, dated 3rd October 1888, the following transfers made to the Municipal General Fund Pass Book during the past week :—*On 24th June* 1893—(*a*) from the 27 lakhs Drainage and Water Works Loan Deposit Account, Rs. 1,198-7-0 ; (*b*) from the New Sanitary Works Loan Deposit Account No. 2, Rs. 2,996-3-0 ; (*c*) from the Agripada House Sullage Water Connections Loan Deposit Account, Rs. 1,747-12-0 ; (*d*) from the Surplus Cash Deposit Account, Rs. 57,461-13-0."*

No. 3117. *Resolved* : "That the following be referred to the Commissioner for disposal and that the applicant be informed accordingly :—Letter, dated 29th ultimo, from Rajumabee Noorbeebee, complaining of the hay stored by one Ismail at Mahim in his stable for buffaloes."

Considered the following :—Letter No. 1180, dated 26th instant, from the Chief Accountant, to the Commissioner—

SIR,—With reference to the then Town Council's resolution No. 1208, dated 17th November 1886, and the latter portion of their resolution No. 1444, dated 22nd December 1886, I have the honour to forward for the information of the Standing Committee the accompanying statement showing the investments of the different Loan and Reserve Fund balances up to 31st March 1893.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

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* The Chief Accountant reports to the Commissioner that the balances remaining to the credit of the respective Deposit Accounts, after effecting the above transfers, stand as under :—

(*a*)	In 5 per cent. Municipal Debentures for...	...	...	Rs. 48,000	= Rs.	48,000
(*b*)	Do.	do.	...	... „ 1,20,000	= „	1,20,000
(*c*)	Do.	do.	...	... „ 70,000	= „	70,000
(*d*)	Do.	Rs. 23,42,000	= Rs.	23,42,000	0 0	
	In 4 % Muni. Debrs. for	„ 27,000	= „	27,000	0 0	
	Do. Govt. Paper	„ 4,33,000	= „	4,31,700	5 0	
	In cash...		„	8,649	3 0	
						28,09,349 8 0

133769

Statement showing the Balance of Loan

PARTICULARS.			Amount.		
			Rs.	a.	p.
1. 27 Lakhs Drainage and Water Works Loan—					
Balance on 1st April 1892 ...	Rs.	48,000 0 0			
Less—Amount drawn in 1892-93	,,	*Nil.*			
			48,000	0	0
2. 44 Lakhs Sanitary Works Loan—					
Balance on 1st April 1892 ...	Rs.	6,55,548 10 4			
Less—Amount drawn in 1892-93 from the Govt. Paper Deposit...	,,	48,740 2 1			
			6,06,808	8	3
3. 7 Lakhs Sanitary Works Loan—					
Balance on 1st April 1892 ...	Rs.	1,20,000 0 0			
Less—Amount drawn in 1892-93..	,,	*Nil.*			
			1,20,000	0	0
4. 12 Lakhs Drainage and Water Works Loan—					
Balance on 1st April 1892 ...	Rs.	2,54,043 12 0			
Less—Amount drawn in 1892-93 from the Govt. Paper Deposit...	,,	19,925 0 0			
			2,34,118	12	0
5. Miscellaneous Works Loan of Rs. 10,08,500—					
Balance on 1st April 1892 ...	Rs.	99,625 0 0			
Less—Amount drawn in 1892-93	,,	*Nil.*			
			99,625	0	0
6. Agripada House Sullage Water Connections Loan of Rs. 2,48,000—					
Balance on 1st April 1892 ...	Rs.	1,70,000 0 0			
Less—Par value of debentures transferred to Surplus Cash Deposit account in 1892-93 to replace advances made to meet expenditure on the works ...	,,	1,00,000 0 0			
			70,000	0	0

and Reserve Funds on 31st March 1893.

How invested.	Remarks.
In 5 % Municipal Debentures for Rs. 48,000 at par.	
In 4 % Government Paper for Rs. 6,20,000 = Rs. 6,06,808 8 3	
In 5 % Municipal Debentures for Rs. 1,20,000 at par.	
In 4 % Government Paper for Rs. 2,35,000 = Rs. 2,34,118 12 0	
In 4 % Government Paper for Rs. 1,00,000 = Rs. 99,625 0 0	
In 5 % Municipal Debentures for Rs. 70,000 at par.	

Particulars.			Amount.		
			Rs.	a.	p.
7. Municipal Building Loan—					
Balance on 1st April 1892 ...	Rs.	8,00,000 0 0			
Less—Par value of debentures transferred to Surplus Cash Deposit account in 1892-93 to replace advances made in 1891-92 and 1892-93 to meet expenditure on the construction of the building...	„	4,55,000 0 0			
			3,45,000	0	0
8. 4½ Lakhs Loan for Fire Brigade Quarters and Stations—					
Amount of debentures issued at par in favor of this loan as per Standing Committee's Resolution No. 8933, dated 23rd November 1892	Rs.	2,23,000 0 0			
Less—Amount drawn in 1892-93.	„	*Nil.*			
			2,23,000	0	0
9. Sinking Fund of the 6 % Loans of 1867-1868—					
Balance on 1st April 1892 ...	Rs.	1,500 0 0			
Less—Amount drawn in 1892-93 to pay off one debenture ...	„	500 0 0			
			1,000	0	0
10. 5% Municipal Loans Sinking Fund—					
Balance on 1st April 1892 ...	Rs.	4,24,747 13 9			
Add—Instalments due in 1892-93 ...Rs.	1,68,050 0 0				
Net interest realized during 1892-93... „	20,757 1 3				
		1,88,807 1 3			
			6,13,554	15	0

How invested.				Remarks.
In 5 % Municipal Debentures at par.	for Rs.	3,45,000		
In 4 % Municipal Debentures at par.	for Rs.	2,23,000		
Deposited in cash with the Bank of Bombay not bearing interest.				
In 5 % Municipal Debentures for Rs. 6,13,500 at par	= Rs.	6,13,500	0 0	
Deposited in cash at the Bank of Bombay ...	„	54	15 0	
	Rs.	6,13,554	15 0	

PARTICULARS.					Amount.		
					Rs.	a.	p.
11. Municipal Buildings Fire Insurance Fund—							
Balance on 1st April 1892 ... Rs.			9,387	12	5		
Add—							
Amount set apart in 1892-93 ... ...Rs.	3,000	0	0				
Net Interest realized during 1892-93 ... „	386	4	0				
			3,386	4	0		
					12,774	0	5
12. Worn out Mains Renewal Fund—							
Amount set apart in 1892-93					1,00,000	0	0

How invested.					Remarks.
In 5 % Municipal Debentures for Rs. 12,500 at par =	Rs.	12,500	0	0	
Deposited in cash at the Bank of Bombay ...	„	274	0	5	
	Rs.	12,774	0	5	
In 5 % Municipal Debentures for Rs. 97,500 at par =	Rs.	97,500	0	0	
Add— Interest (on Rs. 95,000 from 1st October 1892 to 28th March 1893 and on Rs. 2,500 from 1st January to 28th March 1893), which will be drawn and credited to this Fund in April and July 1893 when realized.	„	2,379	2	8	
	Rs.	99,879	2	8	
Deposited in cash at the Bank of Bombay ...	„	120	13	4	
	Rs.	1,00,000	0	0	

PARTICULARS.				Amount.		
				Rs.	a.	p.
13. Surplus Cash—						
Balance on 1st April 1892 ...			Rs. 21,02,359	12	5	
Add—						
Amount of surplus of the Tansa Loan Interest Fund			„ 7,51,005	6	9	
			Rs. 28,53,365	3	2	
Add—						
Par value of 5 °/₀ Municipal debentures transferred from the following accounts to replace advances—						
Tansa Loan Depst.	Rs. 2,65,000	0 0				
Municipal Building Loan Deposit ...	„ 4,55,000	0 0				
Agripada House Sullage water connections Loan Deposit	„ 1,00,000	0 0				
	Rs. 8,20,000	0 0				
Par value of 4 °/₀ Debentures issued out of the 4½ lakhs Loan for Fire Brigade Quarters and Stations to replace advances as per Standing Committee's Reso. No. 8933, dated 23rd November 1892 ...	„ 27,000	0 0				
			8,47,000	0	0	
			37,00,365	3	2	
Deduct—						
Amount drawn during 1892-93 *	Rs. 6,09,664	14 2				
Par value of 5 °/₀ Debentures transferred to the Sinking Fund account	„ 1,89,000	0 0				
Do. do. the Municipal Buildings Fire Insurance Fund accounts ...	„ 3,500	0 0				
Do. do. the worn out Mains Renewal Fund account	„ 97,500	0 0				
			8,99,664	14	2	
						28,00,700 5 0

* From Cash Deposit ... ... Rs. 3,29,527 6 2
„ Govt. Paper Deposit ... ... „ 2,80,137 8 0
Rs. 6,09,664 14 2

How invested.				Remarks.
In 5% Municipal Debentures for Rs. 23,42,000 at par	= Rs. 23,42,000	0	0	
In 4% do. Rs. 27,000 at par	= Rs. 27,000	0	0	
In 4% G. Paper for Rs. 4,33,000	= Rs. 4,31,700	5	0	
Rs. 28,02,000	Rs. 28,00,700	5	0	

SUMMARY.

		Invested in Paper.			Deposited in Cash at the Bank of Bombay.	Grand Total.
		In 5% and 4% Municipal Debentures at par.	In 4% Government Paper.		Total.	
			Nominal Value.	Actual Cost.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	27 Lakhs Drainage and Water Works Loan ...	(5%) 48,000 0 0	.....	.....	48,000 0 0	.....	48,000 0 0
2	44 Lakhs Sanitary Works Loan	.....	6,20,000 0 0	6,06,808 8 3	6,06,808 8 3	.....	6,06,808 8 3
3	7 Lakhs Sanitary Works Loan	(5%) 1,20,000 0 0	.....	.....	1,20,000 0 0	.....	1,20,000 0 0
4	12 Lakhs Drainage and Water Works Loan ...	.....	2,35,000 0 0	2,34,118 12 0	2,34,118 12 0	.....	2,34,118 12 0
5	Miscellaneous Works Loan of 10,08,500 ...	.....	1,00,000 0 0	99,625 0 0	99,625 0 0	.....	99,625 0 0
6	Agripada House Sullage Water Connections Loan of 2,48,000	(5%) 70,000 0 0	.....	.....	70,000 0 0	.....	70,000 0 0
7	Municipal Building Loan of 8 lakhs	(5%) 3,45,000 0 0	.....	.....	3,45,000 0 0	.....	3,45,000 0 0
8	4½ Lakhs Loan for Fire Brigade Quarters and Stations	(4%) 2,23,000 0 0	.....	.....	2,23,000 0 0	.....	2,23,000 0 0
	Rupees ...	8,06,000 0 0	9,55,000 0 0	9,40,552 4 3	17,46,552 4 3	.....	17,46,552 4 3
9	Sinking Fund of the 6 % Loans of 1867-68 ...	.....	.....	.....	.....	1,000 0 0	1,000 0 0
10	5 % Municipal Loans Sinking Fund	(5%) 6,13,500 0 0	.....	.....	6,13,500 0 0	54 15 0	6,13,554 15 0
11	Municipal Buildings Fire Insurance Fund ..	(5%) 12,500 0 0	.....	.....	12,500 0 0	274 0 5	12,774 0 5
12	Worn out Mains Renewal Fund	(5%) 97,500 0 0 *2,379 2 8	.....	.....	99,879 2 8	120 13 4	1,00,000 0 0
13	Surplus Cash	(5%) 23,42,000 0 0 (4%) 27,000 0 0	4,33,000 0 0	4,31,700 5 0	28,00,700 5 0	.....	28,00,700 5 0
	Total Rupees ...	39,00,879 2 8	13,88,000 0 0	13,72,252 9 3	52,73,131 11 11	1,449 12 9	52,74,581 8 8

* Interest on bonds for Rs. 95,000 from 1st October 1892 to 28th March 1893 and on Rs. 2,500 from 1st January 1893 to 28th March 1893.

No. 6376 of 1893-94.

BOMBAY, 28*th June* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

No. 3118. *Resolved* : "That the consideration of memorandum No. 6376, dated 28th ultimo, from the Commissioner, with its accompaniments, be postponed, and that in the meanwhile the papers be printed on the minutes of this day's meeting."

No. 3119. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6403, dated 28th ultimo, the Corporation be recommended to sanction the writing off of Rs. 354, being the value of 377 and 331 Building Certificate and Repair Forms which have become useless on account of the new forms printed under the Building By-Laws."

No. 3120. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6472, dated 29th ultimo, sanction be given to the appointment of Mr. W. R. Mowforth as a Sub-Inspector, Health Department, on a salary of Rs. 50 per mensem. As Mr. Mowforth is over 35 years of age, he will not be allowed to contribute to the pension fund, and the special reason for appointing him is that he has had some experience of cantonment sanitation and is well fitted for the post in question."

No. 3121. Considered and *recorded* the following:—

Statement of houses or portions of houses which fell during the month of May 1893.

No.	Ward.	Street No.	Locality.	Names of Owners.	Description of Buildings.	Age of Building or date of erection (if known).	Date of fall.	Cause of fall.	Part fallen.	Casualties. Persons injured.	Casualties. Persons killed.	Estimated loss.	Whether or not action taken by the Municipality.	Whether or not warning given to the parties.	Remarks.
						Years.						Rs.			
1	B	41	Nagdevi Street	Bai Rajbai Tajoo Kasai.	Chawl ...	50	2nd May 1893.	On account of old age.	Whole of the north portion of the Chawl.	4	...	200	Under notice		
2	...	2½	DeSouza Street	Rakhmajee Vithoojee.	House ...	75	19th May 1893.	Ditto ...	West side wall of the house.	1	...	75	...	Nil ...	

No. $\frac{4167}{21\text{-}6\text{-}93\text{-}94}$ OF 1893-94.

Forwarded to the Municipal Commissioner.

M. C. MURZBAN,
Executive Engineer.

No. 6263 OF 27*th June* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

No. 3122. Considered and *recorded* the following :—

No. 10799 OF 1893-94.

BOMBAY, 28*th June* 1893.

TO THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to forward the following analysis of a sample of Tulsi water from the Reservoir. The water contains much organic-decaying and dead débris, and hence—due to the organic matter in decomposition and imperfect filtration—the large proportion of free ammonia. The large amount of "free ammonia" need not in itself be regarded with alarm, for it is better that the organic matter should be in the form of "free ammonia" than remain in the state indicated by "albuminoid ammonia." It would be well to consider whether the filtering media should not be changed and a purer (in the sense of quality) sand used in the event of larger and more complete measures of filtration being adopted, of the necessity of which there can be no doubt. A purer water-supply is merely a question of larger beds for filtration and slower filtration, that is, more filtration.

	Parts per million.
Free ammonia	·15
Albuminoid ammonia	·16

I have, &c.,
T. S. WEIR, Health Officer.

No. 6563 OF 1893.

BOMBAY, 30*th June* 1893.

Forwarded to the Standing Committee. Proposals for increasing the filtering area at the Malabar Hill Reservoir are under preparation.

H. A. ACWORTH, Commissioner.

The following return was read and *recorded* :—

No. 3123. Return of fires at Frere Bunder, Kamatipura 3rd Lane, Mahim Bazar Road, Chowpatti and Ginger Street (Mandvi), forwarded with the Commissioner's memoranda No. 6669, dated 1st July 1893.*

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* *See* Appendix C.

The following statement* was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 2nd July 1893.

No. 3124. *Resolved* : "That, as applied for by the Commissioner in his letter No. 6660, dated 1st instant, sanction be given to the transfer of Rs. 162 from savings in the Drainage Department Budget, section 4B, Contingencies, Maintenance of Love Grove Pumping Station, to same Department, Section I, Establishment, to meet excess due to extra staff of drivers and oilmen employed to work the 18" and 10" centrifugal pumps day and night owing to the excessive height of the sewage."

No. 3125. *Resolved* : "That the following be *recorded* :—Letter No. 6846, dated 4th instant, from the Commissioner, reporting that he has accepted the offer of Mr. Abdoola Allibhai Ibrahim to pay Rs. 10 per mensem for the right of selling refreshments at the Victoria Gardens, *plus* Rs. 25 per mensem for the use of the room therein for a period of one year only."

No. 3126. *Resolved* : "That, as applied for by the Commissioner in his letter No. 6915, dated 4th instant, and under the circumstances reported by him, sanction be given to the acceptance by him of the tender of Messrs. Hormusji Jamasji Mistri and Piroshaw Dhanjibhoy Patel at schedule rates, aggregating Rs. 71,264-5-3 for the work of constructing the stables for the Health Department bullocks in F and G Wards. The amount to be met from the advance of Rs. 78,744, sanctioned by the Corporation in their resolution No. 12246, dated 16th February 1893."

The Commissioner reported another burst in the Tansa main on the Supari Bag Road, Parel, early this morning. He could not say what the cause of the frequency of the bursts were, but stated that it formed a subject of enquiry, and it was not improbable that the whole of the section in which the burst had occurred would require relaying.

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* *See* Appendix B.

Resolved : "That the following be *recorded* :—Letter No. 6922, dated this day, from the Commissioner, reporting that he has sold the rights of cutting grass as per following statement :—

No. 3127.

The Sale of the Right of Cutting Grass on Municipal Land at the following places.

Names of places.	Description of the land.	Name of the highest bidder.	Amount realized for 1892-93.	Amount received for 1893-94.	Remarks.
			Rs. a. p.	Rs. a. p.	
1. Municipal land at Malabar Hill Reservoir.	About ¼ acre slope of reservoir and 2 acres of rough land.	Govind Rama ...	39 0 0	40 0 0	
2. Municipal land at Tulsi pipe line from Mahim to Mahalaxmi.	A strip 50 feet wide, but taken up for pipe and road.	Mungroo Jugga...	56 0 0	40 0 0	
3. Municipal land at Tansa pipe line from Kurla Creek to Dadar Road.	A strip 100 feet wide but taken up for pipe, tram line, road, &c.	Do. ...	.....	20 0 0	The right has been sold for the first time this year.

Resolved: "That, as applied for by the Commissioner, in his letter No. 6920, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Richardson and Cruddas, the only one received, for the supply of cast-iron and galvanized sheet-iron vent shafts and cast-iron covers, frames and steps for manholes, required for the Colaba Sewerage Works, aggregating Rs. 25,012-8-0. The cost to be met from the allotment for the Colaba Sewerage Works." No. 3128.

BOMBAY, 12*th July* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SIROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the meeting held on the 5th instant, were signed.

The seal of the Corporation was affixed to deeds of agreement (1 & 2) with Messrs. Suggajee Ramjee and Tukaram Daji for cultivating Municipal grounds at Coorla and Tardeo ; (3) with Mr. Raghunath Shivram permitting him to retain the unauthorized wall of his house erected by him on land leased from the Fazindar at premises No. 150 on one of the proposed roads at Agripada near Ripon Road in consideration of the lessee foregoing all claim for the wall when the said wall is required to be pulled down in connection with the proposed road, &c. ; and (4) to deed of contract with Messrs. W. & E. Garlick for the erection and working of a three-furnace Garlick's Incinerator.

The seal was also affixed to 10 attested duplicate debentures of the Municipal Loan of 1878, Nos. 1328, 1329, 2280, and 4061 to 4067, of Rs. 500 each.

Resolved : "That, as applied for by the Commissioner, in his memoranda Nos. 7000 and 7097, dated 6th and 7th instant, and Nos. 7268, 7269 and 7270, dated 10th idem, sanction be given under section No. 3497.

351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. D. B. Pereira	...Building at Dadar, Khumbarwada.
„ Hiraji Putlaji	„ at Parel Tank Road.
„ Abdul Hussain Heptoola Rasimwalla...	„ at Walkeshwar Road.
„ Purshotum Shewram	„ at Sheik Memon Street.
„ Kassim Mahomed Mitha ...	„ at Fergusson Road,Parel."

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 7448, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith." No. 3498.

Proposed by G. W. Roughton, Esq., seconded by Grattan Geary, Esq.—

"That, as recommended by the Commissioner, in his memorandum No. 7183, dated 8th instant, and under the Pension Regulations, sanction be given to the payment of a monthly pension of Rs. 300, to Mr. P. C. Higgins, from 27th June 1893.

"2. That, in consideration of his long and faithful service of 34 years, sanction be further given, under regulation 15 (*d*) of the Pension Regulations, to an extra good service pension of Rs. 50 a month from the same date being granted to Mr. Higgins.

"3. The amount to be met from the grant for pensions and gratuities, current year's budget."

Amendment, proposed by Javerilal U. Yajnik, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the second para. of the motion be deleted."

On a division, the amendment was *carried* as a substantive motion, the votes being 6 *for* and 4 *against*.

The motion passed was as follows :—

"That, as recommended by the Commissioner, in his memorandum No. 7183, dated 8th instant, and under the Pension Regulations, sanction be given to the payment of a monthly pension of Rs. 300, to Mr. P. C. Higgins, from 27th June 1893. The amount to be met from the grant for pensions and gratuities, current year's budget." No. 3499.

Resolved : "That, as applied for by the Commissioner, in his letter No. 6946, dated 5th instant, and under the terms of section 69 (*e*) of the Municipal Act, sanction be given to the variation of the contract No. 3500.

of Messrs. Bhedwar & Co., for the construction of Connaught and Sussex Roads, whereby the contract time shall be extended to 23rd July 1893."

No. 3501. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 6947, dated 5th instant, and under the terms of section 69 (*e*) of the Municipal Act, sanction be given to the variation of the contract of Mr. Shankerrao Baba Mandrupkar for the supply of house number-plates, whereby the contract time shall be extended up to 30th June 1893."

Considered letter No. 7010, dated 6th instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to state that a gas lamp and column was broken by a hack victoria driver on the 10th ultimo, by dashing the vehicle against the lamp-post at Shaik Memon Street. The owner of the victoria has addressed a letter to the Manager, Gas Company, on the subject, in which he states that, as the horse took fright at something, it became restive and unmanageable, dashed against the lamp-column and broke it. He acknowledges his liability, but pleads inability to pay the full amount of the damage and has offered Rs. 20 for the same. The Manager, Gas Company, states that the cost of putting up the lamp will be Rs. 45 and adds that, under the circumstances stated by the party, if the Municipality sacrifice Rs. 10, the Company will do the same and replace the lamp and column for Rs. 35. Under the circumstances and as a special case I propose to call upon the owner to pay 25 for the damage done. Rs. 10 will be paid by the Gas Company and Rs. 10 by the Municipality, which can be met out of the contingent grant for gas lighting; and I have the honour to request the approval of the Standing Committee to the above arrangement under section 517(*j*) of the Municipal Act.—I have, &c., H. A. ACWORTH, Commissioner.

No. 3502. *Resolved* : "That, with reference to the Commissioner's letter No. 7010, dated 6th instant, sanction be given, as a special case, under section 517 (*j*) of the Municipal Act, to the owner of the hack victoria who broke the gas lamp and column at Sheik Memon Street, being called upon to pay Rs. 20 towards the cost of putting up the lamp.

"That, inasmuch as the Gas Company have signified their willingness to bear a portion of the charge, *viz.* Rs. 10, sanction be given to the payment of Rs. 15 towards meeting the whole charge of Rs. 45 for putting up the lamp in question.

"The amount to be met from the contingent grant for gas lighting."

Read letter No. 7315, dated 10th instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to state that the quantity of water, delivered at the Love Grove Pumping Station since Tansa water was received into the City, has been more than the old pumping engines could cope with and that they have continued to show worse results with every increase in the demand upon them. In addition to the incessant working of these four engines, it has been found absolutely necessary to work the 18" and 10" centrifugal pumps day and night from the commencement of the year to prevent the overflow of sewage in the low parts of the City, and the average daily quantity of coal consumed by the engines and pumps is 14½ tons.

To meet this demand 2,500 tons were purchased from time to time, which will last up to the end of August next. The cost of this has caused an excess of Rs. 5,939 over the grant for the purchase of coal for the current year based on the average consumption of 6 tons per day. The new engines are now working and the consumption of coal has been reduced to about 7 tons per day, and the quantity of the coal required at this rate from 1st September 1893 to 28th February 1894, that is, up to the end of the year is 1,267 tons. This will cost about Rs.20,805-8-0 taking it at an all-round rate between Rs. 16 and Rs. 16½ a ton. Thus the total supplementary grant required, as will be seen, is Rs. 26,744-8-0, to which I request sanction. The excess is not due to prices paid for the coal but to the quantity consumed.

This amount can be paid, with the sanction of the Corporation, out of the surplus of 4½ lakhs, which has accrued since the publication of the revised estimates for the year 1892-93. Out of this sum, Rs. 31,187 have already been sanctioned and an expenditure of Rs. 7,944 has been recommended for sanction.

For similar reasons the grant for 1892-93 was supplemented and the total cost was Rs. 66,666-1-5. It will, of course, be borne in mind that double as much sewage is now pumped at Love Grove as was pumped 18 months ago.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 7315, dated 10th instant, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to a supplementary grant of Rs. 26,744-8-0, which, it is estimated, will be required in addition to the budget grant of Rs. 40,000, for the purchase of coal for the Love Grove Pumping Station up to the end of the current financial year. The amount to be met out of the surplus of about Rs. 4½ lakhs, which has accrued since the publication of the revised estimates for 1892-93."

No. 3503.

Resolved : "That the following be *recorded*:—Letter No. 7299, dated 10th instant, from the Commissioner reporting, as required by section 69 (*d*) of the Municipal Act, that he has accepted the following offers for the supply of street name-plates :—(1) Mr. Shankerao Baba Mandrupkar, for the supply of 315 plates of local manufacture at Rs. 3-12-0 each ; (2) Messrs. Latham & Co., for the supply of 481 English-made plates at Rs. 4-5-6 each. The cost, Rs. 3,270-9-6, to be met out of the grant of Rs. 1,000, for the current year and that renewed for last year."

No. 3504.

Read letter No. 7309, dated 10th instant, from the Commissioner, to the Secretary, as under :—

Sir,—With reference to my letter No. 6626 of 30th ultimo, and Standing Committee's resolution No. 3111 of 5th instant, I have the honour to say that I should wish to withdraw the proposal that the Superintendent, Victoria Gardens, should visit Calcutta, &c., as the Visiting Committee of the Bombay Natural History Society, which has at my request been reconstituted, has made a variety of proposals for the improvement of the zoological collection which I shall embody with the least possible delay in a report to the Corporation and which render it advisable to forego the intention expressed in my above letter or at all events to hold it in abeyance for the present.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 7309, dated 10th instant, from the Commissioner, be *recorded*, and under the circumstances reported by him, the resolution of the Committee, No. 3111, dated 5th idem, be rescinded."

No. 3505.

Resolved: "That, as applied for by the Commissioner, in his letter No. 7287, dated 10th instant, sanction be given, under the terms of sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the High Court against Mr. Pestonji Hormusji for the recovery of Rs. 163-6-6 in respect of property tax bill No. 6530 for the 2nd half of 1890-91 of house, G ward, No. 1030 (1)."

No. 3506.

Resolved : "That the following be *recorded* :—Memorandum No. 6376, dated 28th ultimo, from the Commissioner, forwarding statement showing the investments of the different Loan and Reserve Fund balances up to 31st March 1893.

No. 3507.

"2. That in future returns the dates on which the investments were made, be shown."

Resolved: "That the following be forwarded to the Commissioner for favour of report and that the applicants be informed accordingly:—Memorandum from the Acting Municipal Secretary, forwarding petition, dated 20th ultimo, addressed to the Corporation by the rate-payers and residents of Upper Mahim, complaining of the bad condition of the roads thereat and the unsatisfactory manner in which the gas and kerosine lamps of the streets are lighted." No. 3508.

Resolved: "That the following be forwarded to the Commissioner for favour of report and that the applicant be informed accordingly:—Memorandum from Acting Municipal Secretary, forwarding petition, dated 6th instant, addressed to the Corporation by Mr. Anant Baburao Paranjeepe, inviting attention to the unsatisfactory way in which Kandawady Lane is being repaired." No. 3509.

The following statement* was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 9th July 1893.

It was agreed that the members of the Committee should visit the Love Grove Pumping Station next Wednesday afternoon, the 19th instant, after the disposal of the usual weekly business. No. 3510.

BOMBAY, 19*th July* 1893.

AT the meeting of the Standing Committee held this day, there were present:—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; JAVERILAL UMIASHANKAR YAJNIK, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the ACTING SECRETARY.

The minutes of the meeting held on the 12th instant, were signed.

The seal of the Corporation was affixed to deed of agreement with Mr. Kavasji Nanabhai and the Corporation, securing to the Municipality the right No. 3807.

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* *See* Appendix B.

to acquire at any future time the set-back of property situated at Nos. 169-171, Bora Bazar Street, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed and at the rate of Rs. 30 per square yard for any land shown on the plan, to be there taken up, exclusive of any loss, damage or expense sustained by him by reason of such acquisition.

No. 3808. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 7619, dated 14th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of Owner.	Where.
Mr. Govindji Thakarsi Mulji	Building at Cavel Street."

No. 3809. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 8083, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 3810. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 7592, dated 13th instant, sanction be given to the acceptance by him of the tender of Messrs. Spencer & Co., for the work of constructing pipe-sewers, manholes, &c., in Currey Road, at rates aggregating Rs. 5,416·499. The amount to be met out of the grant, sanctioned for the work by the Corporation, in its resolution No. 1533, dated 15th May last."

No. 3811. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 7340, dated 11th instant, sanction be given to the payment of compensation in respect of 152·47 square yards, or thereabout, of land acquired for street improvement at Walkeshwar Road, to Mr. Abdul Husain Heptoola, instead of to Memon Aba Habib, as sanctioned in the Town Council's Resolution No. 1490, dated 5th January 1887, and the Standing Committee's Resolution No. 4145, dated 9th October 1889."

The consideration of the question of the purchase of 200 tons of Nixon's Navigation and 200 tons of West Hartley coal from Messrs. J. Brooks & Co., delivered at Love Grove, was postponed till next meeting, the Chairman having pointed out the illegality of sanctioning the amount as the whole of the budget grant is already spent.

Considered letter No. 7452, dated 12th instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to state that one Mr. Purshotum Ganoba has offered for sale 8 acres and 30 gunthas of his land on the west side of the Vehar Lake at Rs. 75 per acre, including the following trees standing on the ground in question: 75 teak, 90 khair, 110 tad, 3 mango and 200 jungle trees. The Executive Engineer reports that the rate demanded is fair and adds that it is desirable that the Municipality should have command of the Vehar area as they have of Tulsi, more especially of those portions immediately adjoining the lake, and recommends that, as a favourable opportunity has offered itself, the ground should be purchased by the Municipality. I concur in the views of the Executive Engineer and request the sanction of the Standing Committee, under section 90 (1) of the Municipal Act, to the purchase of the ground in question at a cost of Rs. 656-4-0.

The amount will be paid, with the sanction of the Corporation, out of the surplus of 4½ lakhs which has accrued since the publication of the revised estimates for the year 1892-93. Out of this sum, Rs. 39,131 have already been sanctioned, and an expenditure of Rs. 26,744-8-0 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 3812. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 7452, dated 12th instant, sanction be given to the purchase of 8 acres and 30 gunthas of land from Mr. Purshotum Ganoba on the west side of the Vehar Lake at the rate of Rs. 75 per acre, including the trees standing thereon. That the Corporation be recommended to sanction the payment of Rs. 656-4-0, out of the surplus of about 4½ lakhs which has accrued since the publication of the revised estimates for 1892-93, to meet the cost of the land in question."

No. 3813. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 7350, dated 11th instant, sanction be given to the payment of Rs. 10-8-3, to Idrooskhan, the night-driver of the 10″ centrifugal pump at Love Grove, being the amount of his wages from 25th May to 9th June last, during which time he was in hospital suffering from injuries sustained while in the execution of his duties."

Resolved : "That the following be *recorded*:—Letter No. 7450, dated 12th instant, from the Commissioner, reporting that he has sold the right of cutting grass during this monsoon from the ride and footpath on Clerk Road between the Mahaluxmi Station Railway crossing and the Metal Depôt at the junction of Clerk and Tardeo Roads, to Messrs. Narsu Ellapa and Krishna Sagooji for Rs. 87*.

No. 3814.

Considered the following :—

No. 1359 of 1893-94.

BOMBAY, *8th July* 1893.

To the MUNICIPAL COMMISSIONER.

SIR,—I have the honor to forward for transmission to the Standing Committee a return of receipts and disbursements of the Bombay Municipility for the quarter ending 24th June 1893, as compared with the corresponding quarter for the previous year as required by the then Town Council's Resolution No. 465 of 1st June 1887, with a list of additional grants sanctioned by the Corporation during the quarter.

2. I have already reported to you in my letter No. 187 of the 17th April last the state of the surplus cash balance, the exact amount of which will be reported to you by the end of this month while submitting the result of the past year's accounts now being finally closed.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

* Last year the sale realised Rs. 25.

List of Additional Grants sanctioned by the Corporation for the Quarter ending 30th June 1893.

No. of Resolution.	Date of Resolution.	Nature of work.	Amount. Rs. a. p.
207	April 6, 1893....	Grant of Rs. 200 from surplus cash balance to meet compensation awarded to the widow of Pandoo Gopal, a mill labourer, who was killed in the Kala Chowki Road on the 18th February last by an accident which happened to the Byculla Steam Fire Engine ...	200 0 0
211	„ 6 „ ...	Grant of Rs. 9,000 from surplus cash balance to meet the cost of 75—100 feet lengths of additional hose for the Fire Brigade	9,000 0 0
606	„ 17 „ ...	Grant of Rs. 8,750 from surplus cash balance to meet the cost of insuring the Municipal Office Buildings	8,750 0 0
1128	May 4 „ ...	Grant of Rs. 100 a month from surplus cash balance to meet the cost of an allowance payable to Mr. Leask during the absence of Mr. Barrow on privilege leave for three months	300 0 0
1132	„ 4 „ ...	Grant of Rs. 3,386 from surplus cash balance to meet the cost of constructing tanks and temporary drains for the abatement of the nuisance complained of by the residents of Wodehouse Bridge, Colaba	3,386 0 0
1529	„ 15 „ ...	Grant of Rs. 1,247 from surplus cash balance to meet the cost of constructing the collecting Night-Soil Depôt at Colaba	1,247 0 0
1531	„ 15 „ ...	Grant of Rs. 7,290 from surplus cash balance to meet the cost of repointing with Indian Patent Stone the remaining portions (3,300 square ft.) of the inner faces of the outer walls of the Bhandarwada Reservoir Distributing Basin and of plastering 16,000 square ft. of arches, so as to avoid further leakage from the Reservoir	7,290 0 0
2144	June 5 „ ...	Grant of Rs. 1,214 from surplus cash balance to meet the cost of employment of the staff for the protection of the new Municipal offices and its contents	1,214 0 0
2400	„ 12 „ ...	Grant of Rs. 2,500 from surplus cash balance to meet the cost of a suitable casket to contain the address, which is to be presented to H. R. H. the Duke of York on the occasion of his marriage with the princess May of Teck and Rs. 350 to meet the cost of engrossing and forwarding such address	2,850 0 0
2402	„ 12 „ ...	Grant of Rs. 1,950 from surplus cash balance to meet the cost of erecting a small shed at Bandora to stable the bullocks, as well as a small hut for the Halalkhor and Cart-drivers in connection with the latrine erected there	1,950 0 0
		Total Rs....	31,187 0 0

ACCOUNT OF THE BOMBAY MUNICIPALITY CONTRASTED WITH THAT FOR THE

	Budget Estimate.	Quarter ending 25th June 1892.	Quarter ending 24th June 1893.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Opening Balance on 1st April 1893...	16,00,000 0 0	1,83,603 13 5	2,12,572 1 4
General Tax	17,97,596 0 0	5,21,587 9 8	5,49,508 11 11
Water Tax (including other Miscellaneous Revenue)...	13,25,000 0 0	2,99,368 1 10	2,78,360 1 8
Wheel Tax and Tolls ...	3,28,324 0 0	67,191 9 0	61,582 3 0
Halalkhor Tax	5,74,000 0 0	1,63,319 8 5	1,75,601 12 9
Duties, Town...	9,00,000 0 0	2,94,676 5 8	2,34,056 4 10
Licenses	76,850 0 0	16,945 14 0	22,270 7 0
Liquor Licenses, Instalment paid by Govt. in lieu of, under B, Act V, of 1878 ...	1,43,750 0 0	1,43,750 0 0	1,43,750 0 0
Tobacco Duty (under Act IV. of 1857)	1,82,000 0 0	52,819 0 0	52,975 0 0
Market Receipts	3,61,000 0 0	90,628 9 4	86,081 7 1
Miscellaneous Fees	40,300 0 0	11,293 2 4	10,182 12 4
„ Fines and Penalties...	7,000 0 0	5,768 9 3	3,983 0 7
„ Receipts ...	1,20,000 0 0	17,431 5 10	23,123 15 10
„ Savings ...	2,000 0 0	.....	.....
Public Gardens	6,700 0 0	1,291 5 9	3,785 11 6
Contribution from Municipal servants towards Pension, &c., Fund	15,300 0 0	3,883 10 9	3,911 13 1
Tramway Rent	36,200 0 0	18,096 1 11	18,910 3 8
Interest and Profit on Investments	2,29,800 0 0	37,476 8 5	63,780 9 3
Premia on the 42 Lakhs 4 per cent. Loan for repayment of the Govt. consolidated Loan	... .	.....	279 6 0
	61,45,820 0 0	17,45,527 6 2	17,32,133 8 6
Debt	.....	.....	16,500 0 0
Bank of Bombay Loan and other Deposit Accounts ...	.....	2,17,600 0 0	92,124 11 9
Workshop, Recoveries ...	,, ...	458 15 7	2 13 10
Advances	.....	22,228 9 11	12,185 10 9
Deposits	.....	89,767 6 9	2,42,209 8 4
Rupees ...	61,45,820 0 0	20,75,582 6 5	20,95,156 5 2
Total Rupees...	77,45,820 0 0	22,59,186 3 10	23,07,728 6 6

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FOR THE QUARTER ENDING 24TH JUNE 1893, AS QUARTER ENDING 25TH JUNE 1892.

	Budget Estimate.	Quarter ending 25th June 1892.	Quarter ending 24th June 1893.
DISBURSEMENTS	Rs. a. p.	Rs. a. p.	Rs. a. p.
Superintendence	1,95,736 0 0	43,918 2 3	46,139 1 8
Assessment and Collection Department	2,66,060 0 0	50,746 13 5	51,945 7 4
Fire Brigade...	1,11,515 0 0	29,246 1 1	19,317 13 4
Public Gardens	80,147 0 0	9,260 14 9	8,618 0 10
Public Works Engineer's Dept. — General Supervision Estabt. ...	40,924 0 0	9,884 8 2	8,990 8 1
Public Works Engineer's Dept. — Drainage	1,96,991 0 0	36,522 10 4	68,999 2 5
Public Works Engineer's Dept. — Water Works	2,99,924 0 0	39,596 6 0	40,286 15 3
Public Works Engineer's Dept. — Streets and Buildings Inspection and Supervision Estabt. ...	87,917 0 0	20,090 3 4	20,129 15 10
Public Works Engineer's Dept. — Public Lighting ...	3,21,410 0 0	58,085 2 4	46,899 6 0
Public Works Engineer's Dept. — Road Watering... ...	77,744 0 0	16,749 2 4	12,129 1 5
Public Works Engineer's Dept. — Road Repairs and Maintenance...	4,08,419 0 0	81,412 1 2	59,919 3 0
Public Works Engineer's Dept. — Street Improvements ...	1,01,000 0 0	16,134 2 11	18,855 1 1
Public Works Engineer's Dept. — Cleaning, Lighting and Repairing Port Trust Wharves	38,842 0 0	.....	.....
Health Department... ...	13,92,200 0 0	2,31,780 13 10	2,51,803 11 4
Police Charges	3,63,345 0 0	64,571 5 9	90,836 4 0
Education	91,032 0 0	27,349 1 8	29,110 14 11
Hospitals	60,108 0 0	14,842 8 3	13,274 9 0
Miscellaneous	52,050 0 0	19,596 7 3	15,685 6 1
New Works	81,292 0 9	17,820 0 1	35,266 9 0
Debt (including Sinking Fund deposited with the Bank of Bombay)... ...	21,73,412 0 0	4,50,574 15 9	4,30,462 11 5
	64,40,068 0 0	12,38,181 8 8	12,68,669 14 0
Loan Works Accounts ...	.....	6,33,384 15 9	1,82,854 11 8
Bank of Bombay Loan and other Deposit Accounts ...	.....	56,079 3 0	86,135 6 0
Workshops	.....	10,680 4 2	9,325 13 1
Advances	.....	66,180 6 9	36,611 11 10
Deposits	.....	1,64,861 8 0	1,18,947 12 5
Rupees...	64,40,068 0 0	21,69,367 14 4	17,02,545 5 0
Closing Balance ...	.....	89,818 5 6	6,05,183 1 6
Estimated Balance on 31st March 1894...	13,05,752 0 0	.....	.....
Total Rupees...	77,45,820 0 0	22,59,186 3 10	23,07,728 6 6

No. 7417 OF 12*th July* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

Resolved :—"That the following be *recorded* :—Memo-
No. 3815. randum No. 7417, dated 12th instant, from the Commissioner, forwarding a return of receipts and disbursements for the quarter ending 24th June 1893, as compared with the corresponding quarter for the previous year, together with a list of additional grants, sanctioned during the quarter."

Resolved :—"That the following be laid on the table :—
No. 3816. Letter, dated 14th instant, from Messrs. Ardaseer Framjee Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of June last, and compared them with the general, subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statement of their scrutiny of the accounts."

The following statement * was laid on the table :—
Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 16th July 1893.

Resolved : "That, as applied for by the Commissioner, in
No. 3817. his letter No. 7830, dated 17th July 1893, sanction be given, under the terms of section 517 (1) (*j*) of the Municipal Act, to a suit being filed against Mr. Hormasji Sorabji, for the recovery of Rs. 50 on account of damage done by a carriage belonging to him to a Municipal lamp and column at Nepean Sea Road."

Resolved : "That the following be *recorded* :—Letter
No. 3818. No. 7829, dated 17th instant, from the Commissioner, on the subject of the wheel tax due by Mr. Forrest and Captain Fenn.

BOMBAY, *26th July* 1893.

AT the Meeting of the Standing Committee held this day, there was present :—

COWASJEE HORMUSJEE, ESQ., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; KAIKHOSRO N. KABRAJEE, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the Meeting held on the 19th instant, were signed.

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* *See* Appendix **B**.

The seal of the Corporation was affixed to 400 debentures of the Municipal 42 lakhs 4 per cent. loan for repayment of balance of Government consolidated loan, Nos. 1 to 30, 51 to 55, 94, 95 to 136, 145 to 147, 160 to 179 of Rs. 500 each; Nos. 137 to 144, 148 to 159, 410 to 539 of Rs. 1,000 each; and Nos. 3167 to 3370 of Rs. 500 each.

No. 4027. *Resolved*: "That, as applied for by the Commissioner, in his memoranda Nos. 7934, 7935, 7936, dated 18th instant, and No. 8327, dated 22nd idem, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission:—

Names of Owners.	Where.
Mr. Pandurang Raghoba	Building at Girgam Back Road.
Bai Ramabai, widow of Kandas Narayendas	Do. at Nos. 36-38, at 3rd Bhoiwada Street.
Mr. Noor Mahomed Jairajbhoy Peerbhoy	Do. at Forjett Street.
„ Purshotum Vithoba	Do. at Dadar Road (Kumbarwada)."

No. 4028. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 8549, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 4029. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 8328, dated 22nd instant, sanction be given, under regulation 22 of the Pension Regulations, to the payment of compassionate allowance of Rs. 298-11-0, to Bai Saheb, widowed daughter of the late Stores muccadum Guljarkhan. The amount to be met out of the grant for Pensions and Gratuities for the current year."

No. 4030. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 7453, dated 12th instant, sanction be given to the purchase of 200 tons of Nixon's Navigation and 200 tons of West Hartley coal, from Messrs. J. Brooks & Co., at Rs. 16-8 and Rs. 16 per ton, respectively, delivered at Love Grove. The cost to be met from the supplementary grant of Rs. 26,744-8-0, for the purchase of coal, sanctioned by the Corporation, in its resolution No. 3977 of 20th idem.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as similar arrangements sanctioned by the Committee's resolutions Nos. 9755, dated 7th January 1891, and 921, 1453, 4271, 9917, and 12866 of 1892-93 have been advantageous to the Municipality."

No. 4031. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 8104, dated 19th instant, sanction be given to the payment of Rs. 546-13-1, to Messrs. Gahagan & Co., for the supply of flange pipes with bends, &c., which were urgently required for the injection water pipes to the condensers of the new engines at Love Grove. The amount to be met out of the contingency provision in the grant for new engines and pumps at Love Grove."

No. 4032. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 8397 of 25th instant, the Corporation be recommended to sanction the writing off of Rs. 1,683-14-6, from the live stock return of the Health Department, being the book-value of 26 bullocks that died during the quarter ending 31st May 1893."

No. 4033. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 8440, dated 25th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract of Messrs. Gangaram Laxumon & Co., for the construction of Manual Fire Brigade Station at Pedder Market, Mazagon, whereby the contract time shall be extended up to 6th September 1893."

No. 4034. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 8439, dated 25th instant, sanction be given to the appointment of Mr. George Webb as Sub-Inspector in the Health Department on a monthly salary of Rs. 50, and the special reason for appointing him is that he has some experience of cantonment sanitation, is well fitted for the post, and will not be allowed to contribute to the pension fund."

No. 4035. *Resolved*: "That the following be *recorded*:—Letter No. 8287, dated 21st instant, from the Commissioner, reporting that he has sold the right of cutting grass from the Municipal ground at Bhandarwada Reservoir (about ¾ acre slope of reservoir) for the current year, to one Ramjanbhai Babanbhai for Rs. 43."*

* The sale realized Rs. 42 last year.

Resolved : "That the following be *recorded* :—Letter No. 8360, dated 22nd instant, from the Commissioner, reporting that he has sold the right of cutting grass at the following places for the year ending 31st July 1894, *viz.*, (*a*) to cut grass from the Municipal ground near Bellasis Bridge, area 4,828 square yards ; (*b*) from the Municipal ground at Arthur Road, area 6,391 square yards ; (*c*) from the Agripada main drain from Agripada milch cattle stables and from Haines Road to Arthur Road, area 7,720 square yards ; (*d*) from the Municipal ground between Wari Bunder Road and the G. I. P. Railway compound at Hancock Bridge, area 838 square yards—to one Malu Sayana for Rs. 135."*

No. 4036.

Considered letter No. 8365, dated 25th instant, from the Commissioner, to the Secretary, as under :—

SIR,—With reference to Standing Committee's Resolution No. 654 of 19th April last, I have the honor to forward a report, with plan and estimate, from the Executive Engineer. I quite concur with what Mr. Murzban says as to altering the regular line of the street and have sanctioned the alteration. The cost of widening and improving Matharpakhadi road to its junction with Mount Road is estimated at Rs. 13,357. If this is to be proposed for sanction, it must be paid for out of surplus cash balance, as the Road Improvement grant will not bear the charge. Indeed it is probable that a supplementary grant for Road Improvement may, even without this charge, become necessary before the end of the year.

A surplus of 4½ lakhs has accrued since the publication of the revised estimates for 1892-93. Out of this sum Rs. 65,875-8-0 have already been sanctioned, and an expenditure of Rs. 656-4-0 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 5333 OF 1893-94.

BOMBAY, 15*th July* 1893.

TO THE MUNICIPAL COMMISSIONER.

Returned to the Municipal Commissioner. There is a very heavy cart traffic on Matharpakhadi Road. This road at its junction with Mount Road is narrow and steep, and serious accidents occur at this place. With a view to relieve the traffic on this road, the Municipal Commissioner had proposed the widening of Rose Cottage Lane so as to open out a new wide road from Mount Road to the east end of Matharpakhadi Road to which the Corporation have not accorded their sanction (*vide* their Resolution

* Last year the sale realized Rs. 205.

No. 6865, dated 13th February 1890). The cost of the proposal was Rs. 55,598, a portion of which would have been recouped by the sale of 11,555 square yards of frontage land.

For public safety and convenience it is necessary that a new road such as that proposed by the Municipal Commissioner should be constructed, but if that cannot be done, then the Matharpakhadi Road, or at least that part of it which lies between the Gunpowder and Mount Roads, should be widened and improved.

The accompanying plan shows a portion of Matharpakhadi Road. On this plan the red lines are the sanctioned regular lines of the street, and the blue lines are those which I recommend for adoption instead. The blue line from A to B passes partly through open land and partly through two low sheds and an old upper-storied building, while the original red line on the opposite side passes through substantial buildings, which are, as indicated on the plan, two, three, and four stories high. The blue line on the east side of the portion beyond B also passes through open ground and (with the exception of one large well-constructed building) through low inexpensive structures, whereas the red line on the opposite side passes through several upper-storied buildings.

If the grade of the portion of the Matharpakhadi Road from A to B were eased and the road widened as proposed, the cause of complaint will be considerably removed. The estimated cost of the work is Rs. 13,357 as detailed below :—

		Rs.
1.	Easing the grade of the road, including water-tables	2,072
2.	Value of one upper-storied house, two lower-storied sheds, including compound wall and land at the junction of Mount and Matharpkahadi Roads ...	9,222
3.	Vacant land and compound wall	2,063
	Grand Total ...	13,357

A detailed estimate of each of these three items is hereto attached.

The probable cost of improving and widening the Matharpakhadi Road beyond (B) would be Rs. 34,021. Detailed estimates for this work also are submitted, but as it is not very urgently wanted, its extension may be deferred until the Corporation can, without detriment to other more important works, provide funds for it.—M. C. MURZBAN, Executive Engineer.

No. 4037. *Resolved* : "That the consideration of letter No. 8365, dated 25th instant, from the Commissioner, on the subject of the widening of Matharpakhadi Road, be postponed till next meeting, and that in the meantime the papers be printed on the minutes of this day's meeting."

The consideration of the Report of the Sub-Committee of the Standing Committee, appointed on the 5th July 1893 to report on memorandum No. 6432, dated 28th June 1893,

from the Commissioner, on Government Resolution No. 1246, General Department, dated 11th April 1893, on the Administration Report for 1891-92, was deferred till next meeting.

Resolved : "That the following be *recorded* :—Memo-
No. 4038. randum No. 7932, dated 18th instant, from the Commissioner, reporting, with reference to the resolution of the Committee No. 5620, dated 9th January 1889, the transfer (*a*) of Rs. 44,000 (5 per cent. Municipal Debentures), on the 10th instant, from the surplus cash deposit account, to the 5 per cent. Municipal Loans Sinking Fund deposit account. Also reporting, with reference to the Committee's resolution No. 4484, dated 3rd October 1888, the transfer (*b*) of Rs. 44,000, on the 11th instant, from the 5 per cent. Municipal Loans Sinking Fund Deposit Account, to the General Fund Pass Book."*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 23rd July 1893.

BOMBAY, *2nd August* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE. Esq., G.C.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; JAVERILAL UMIASHANKAR YAJNIK, Esq. ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; and ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the ACTING SECRETARY.

The minutes of the meeting held on the 26th ultimo, were signed.

The seal of the Corporation was affixed (1) to 24 attested duplicate debentures of the Municipal Loan of 1878,

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* The Chief Accountant reports to the Commissioner that the balance remaining after effecting the above transfers are—

(*a*) In 5 per cent. Municipal Debentures for ...	Rs.	22,91,000	= Rs.	22,91,000	0 0
„ 4 „ „ ...	„	27,000	= „	27,000	0 0
„ 4 „ Government Paper ...	„	4,33,000	= „	4,31,700	5 0
„ Cash		.....	„	16,664	2 0
			Rs.	27,66,864	7 0
(*b*) In 5 per cent. Municipal Debentures for...	Rs.	6,64,500	= Rs.	6,64,500	0 0
„ Cash		.....	„	372	13 0
			Rs.	6,64,872	13 0

† *See* Appendix B.

Nos. 3542, 4574—86, 4882, 4888, 4914—21, of Rs. 500 each ; (2) to 2 attested duplicate debentures of the Sanitary Works Loan of 1885, Nos. 2072NN and 2073NN, of Rs. 500 each; (3) to 2 consolidated debentures of the Municipal Loan of 1878, Nos. 3128—37 of Rs. 5,000, and Nos. 3138—45 of Rs. 4,000 ; (4) to 216 debentures of the 42 Lakhs Loan, Nos. 540-41 to 970-71, of Rs. 1,000 each ; and (5) to 216 ditto, Nos. 3371 to 3586, of Rs. 500 each ; (6) to 333 ditto, Nos. 180-81 to 308-9, 330-31 to 368-69, 1567-68 to 2061-62, of Rs. 1,000 each ; (7) to 256 ditto, Nos. 370 to 409, Nos. 3587 to 3802, of Rs. 500 each ; (8) 35 ditto, Nos. 3902—21 to 4582—4601, of Rs. 10,000, each ; and (9) to 100 ditto, Nos. 4602—11 to 5592—5601, of Rs. 5,000 each.

The seal was also affixed to deed of contract with Messrs.

No. 4263. Haji Ebrahim Bros., for the supply of clothing to the Water Works and Fire Brigade Departments.

Resolved : "That, as applied for by the Commissioner,

No. 4264. in his memorandum No. 9229, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Considered the following :—

REPORT OF THE SUB-COMMITTEE OF STANDING COMMITTEE APPOINTED UNDER STANDING COMMITTEE RESOLUTION No. 3115, OF 5TH JULY 1893.

The different portions of the Government Resolution which require explanation or comment are given below in succession, and under each are given such remarks as seem to be called for.

Para. 2.

"The cause of the falling off in the Wheel Tax is not altogether "clear, and the details of carts licensed as given by the Assessor "do not agree with those given by the Chief Accountant. This "may perhaps be due to the figures of the former being for the "financial year."

Para. 38 (page 13) of the Commissioner's report contains the following passage :—

"The receipts from wheel tax and toll fees were less than "those of the previous year by Rs. 13,674-11-9, *as the collections* "*for* 1890-91 *included* 21 *months' receipts on account of public* "*conveyances, as explained at page* 8 *of the last Administration* "*Report.*"

The change from the financial to the calendar year accounts for the discrepancy between the figures of the Assessor and those of the Chief Accountant. The former includes in his return (page 208) of 8,996 labour carts licensed for 1890-91, a number of carts whose licenses, though taken out in January, February, or March 1891, and thus included in the financial year 1890-91, in reality ran under the change of term for the calendar year 1891, while the Chief Accountant is comparing the actuals with the estimate for 1891-92, and accounting for the increase by reference to the greater number of labour carts licensed during the financial year.

"The enhancement of the duty on grain caused a large increase "in the receipts from that source, which was, however, more than "counterbalanced by the falling off in the sugar trade. The "figures of the latter are remarkable:—

	1890-91.	1891-92.
	Rs.	Rs.
Import Tax	9,24,613	6,23,089
Refunds	5,92,077	5,53,916
Net	3,32,536	69,173

"The reasons for this great decline are not apparent; it is stated "that German sugar has been driven out of the Bombay market, "but what has taken its place does not appear."

It was stated in the Chief Accountant's report for 1890-91 (page 72) that the imports of sugar for that year were the largest on record. The diminution in imports for the following year would be the natural consequence of the glutting of the market beyond the demand, and this would fully account for it, and is a matter of ordinary experience in other articles even if the "cheap German sugar had not been driven out." It is believed, however, that the cheapness of the German sugar is more than counterbalanced by its comparative defect in saccharine matter, and that, as the supply is exhausted, Bengal and Mauritius sugar are resuming their superiority in the public favour they command. This circumstance, however, has nothing to do with the rise and fall of imports in the two years in question, which is due to the simple reason above given that a temporary stimulus occasioned a temporarily excessive import, with a necessary consequent restriction when the market was over-supplied.

"The policy of speculation alluded to in last year's review was "again pursued with some success, as a net profit of about "Rs. 54,000 was realized from the sale of Government Paper and "Port Trust Bonds and Rs. 1,65,535 from interest on investments "of money and surplus cash. The Budget Estimate for interest

"was again much too low, and the cause has been only partly "explained. If works for which loans have been raised are being "postponed through an unwillingness on the part of the Municipality "to part with favourable investments, it is open to consideration "whether the conditions on which sanction was given to the loans "being raised are being adhered to."

Three charges are made, either directly or indirectly, in the above extract:—

(*a*) That the operations which resulted in a profit of Rs. 54,000 on the sale of Public Securities and Rs. 1,65,533 from interest on investments were speculative.

(*b*) That the Budget Estimate for interest was much too low.

(*c*) That works for which loans have been raised are being postponed for the sake of holding on to the Securities in which the funds have been invested.

They may be taken together. The following Securities were sold during the year at the rates, on the dates, and for the objects stated against each:—

Loan.	Amount.	Cost of purchase.	Sum realized on sale.	Profit.
	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.
(1) 12 Lakhs Drainage and Water Works Loan— 4 per cent. Government Paper ...	3,15,000	3,13,818 12 0	3,31,537 8 0	17,718 12 0
(2) 35 Lakhs Sanitary Works Loan— 4 per cent. Port Trust Bonds.....	2,00,400	1,98,897 0 0	2,05,911 0 0	7,014 0 0
(3) Surplus Cash— 4 per cent. Port Trust Bonds ...	12,000	11,910 0 0	12,326 14 8	416 14 8
4 per cent. Government Paper...	2,19,600 50,000	2,79,423 4 0	2,88,472 0 0	9,048 12 0
(4) Municipal Building Fund— 4 per cent. Government Paper...	27,500	27,156 4 0	2,74,931 4 0	19,868 2 0
Do. do. ...	2,30,500	2,27,906 14 0		
Total ...	10,55,000	10,59,112 2 0	11,13,178 10 8	54,066 8 8

(1) This loan was raised chiefly for the Queen's Road and Girgam Sewerage Works. The sum in question was sold to repay advances from current cash balances for those works. The money had been spent on the works.

(2) This sum was a part of the investment of the 35 lakhs Loan of 1890, made very shortly after the loan was raised. The advances

made against it from cash balances were repaid a year after, *i.e.*, in November 1891, when the market was favourable for sale. Had the market been unfavourable, our balances would have enabled us to postpone the operation.

(3) These sums were mostly invested in November and December 1890 at the termination of the period during which, according to notice from the Bank of Bombay, interest ceased to be payable on our deposits, and a portion in March 1891, when a further surplus accrued. They were sold when the money was required. The law requires us either to invest our balances or to deposit them at the Bank of Bombay at interest. When the Bank refused to pay interest any longer on our current deposits, large investments were made.

(4) In 1881 a sum of Rs. 2½ lakhs was set apart from surplus cash balance, as per Corporation Resolution No. 6239 of 8th August 1881, for the construction of Municipal Offices, and thereafter a sum of Rs. 50,000 was annually voted for the same purpose up to 1887-88, except in 1883-84, when only Rs. 20,000 were voted. The fund thus formed, together with interest accumulations, amounted in 1890-91 to Rs. 7,06,421-8-13, out of which Rs. 4,40,321-5-5 were drawn up to that year to meet payments on account of the buildings, leaving a balance of Rs. 2,66,100-3-5 at the end of 1890-91, Rs. 2,55,063-2-0 being invested in Government Paper for Rs. 2,58,000 and Rs. 11,037-1-5 being deposited in cash. The latter sum was drawn in 1891-92 and the former sold in the same year, the market being favourable, and both were paid against the Building Expenses.

The Sub-Committee are of opinion that none of these transactions in any way deserve to be stigmatized as speculative, unless the element of uncertainty, which must always attend all investments in Public or other Securities, justifies the term. If so, the law is responsible for the speculation and not the Municipality. The investment of a great part of our funds, loan balances, &c., is a necessity, legal as well as actual. If we possessed no current balances sufficient to enable us to watch the market and tide over periods of depression, we should be under the peremptory need of selling our investments directly money was wanted. Being, however, always in possession of current balances amounting to

many lakhs of rupees, we are able, to a great extent, to save ourselves from the risk attendant on such a system, and we would lay ourselves justly open to a much severer imputation if we did not exercise ordinary prudence by availing ourselves of such advantages as we possess and holding on to our investments when we cannot part with them at a profit.

The same remarks apply to a great extent to the excess of Rs. 65,000 under the head of revenue derived from interest on invested funds over what was anticipated when the Budget was prepared. At page 81 of the Administration Report it has been explained how an unexpected sum of Rs. 12,000 accrued as interest on the Building Fund. The other chief heads of excess are under the 35 lakhs Sanitary Works Loan and Surplus Cash. The account of the latter far exceeded anticipations when the Budget was framed, revenue being more and expenditure less than the budget estimates, and as regards the former, the Standing Committee and Corporation are well aware what difficulties have attended the expenditure of the sum (Rs. 15 lakhs) included in that loan for the acquisition of land for roads and their construction. During the whole of 1891-92 the Commissioner was engaged in negotiations on the former account—negotiations which were only completed six months ago, when, as will be in the recollection of all Councillors, not only was the whole balance of the Rs. 15 lakhs called up, but it became necessary to provide for an advance of Rs. 7½ lakhs to the loan. In Agripada alone more than 300,000 square yards of land were acquired at once from two owners, with whom every effort had been made for more than two years to come to a satisfactory settlement. In such large transactions as these, a difference of a few annas per square yard is a serious matter; and though these and other negotiations might, no doubt, have been concluded as soon as they were begun by closing with the owners on their own terms—a proceeding which would have materially reduced the outstandings of the loan—it will hardly be contended that such a course should have commended itself to the Commissioner's judgment. In the same way with regard to the land required for the Pawai Water Works, it is no fault of the Municipality that the transaction was not completed earlier, the owners, or rather the trustees, of the land having fought us over the acquisition to the very last court of resort, though without avail.

The above remarks meet the accusation that the budget estimate for interest was much too low, as well as that the sums received were the result of speculation, assuming, of course, that a censure is conveyed in the former.

No case can be cited in which investments are held because the Municipality deliberately postpone sanctioned works through reluctance to part with them. We quite concur with the view expressed in para. 2 of the Resolution, that if this charge could be made good, there would be a breach of the conditions on which the loans were raised. We could easily go through here the unspent balances of loans *seriatim* and satisfactorily account for them, but this is not required in this place, though they will be found in an appendix. It is sufficient to say here that we are fully aware that such a policy as is hinted at in the Resolution would be altogether illegitimate and indefensible.

Paying 5 per cent. on our loans, and realizing only 4 per cent. from our investments (other than those which are in our own paper), it is not to be supposed that we should act on such a delusive view of facts as to hold the latter in order to make a profit.

It may perhaps be usefully pointed out that the Municipal Act in section 111 distinctly contemplates the practice described as speculative by providing that "all interest and profits arising from "any investment of, or from any transaction in connection with, "money belonging to the Corporation 'shall be credited to' the Municipal Fund."

Para. 3.

"The saving in the Public Health Department is due for the "most part to large over-estimates in establishment and contingen- "cies in the Conservancy Branch. This was also observable in "previous years, and steps might with advantage be taken to "approximate the budget figures to the ascertained requirements."

A reference to the current year's budget will show that the Corporation have estimated for a smaller expenditure than in the previous year under all heads in this department, excepting markets and slaughter-houses, showing a decrease of Rs. 29,113 if the excess on the latter head is taken into account, or one of Rs. 54,747 if it is not. This is mainly in consequence of the Commissioner having come, though with caution and hesitation, to the same conclusion as that which Government suggest, that there was budgetting in the Health Department in excess of requirements. Possibly it may be found feasible next year to reduce the budgetted expenditure still more. But, as the Health Officer points out, it is not easy in a department which controls an establishment of more than 5,000 persons, and which has the health of the city in its charge, to foresee with exactitude effects which depend on causes liable to extreme fluctuation, such as voluntary absence of employés in a healthy season, additions to the work of the department by the municipalization of roads or estates which may or may not occur, and so on. In the

year under report, for instance, it was expected that there would have been a large displacement of halalkhors employed by Government and the Port Trust by Municipal halalkhors, and this was provided for in the budget, though the transfer has not yet occurred. Again, savings in the feeding grant for bullocks in the year under report were, to a great extent, due to the inferior character of the horned cattle sent up for sale at markets in the mofussil, which rendered it impossible for the Health Officer to obtain bullocks of the class he required till late in the year. This it was impossible for him to foresee. Other details might be entered into, if necessary, to show that the difference between estimate and expenditure is not by itself a fair gauge of the soundness of the budget, but it is admitted that, in all probability, there has been a somewhat too liberal view entertained and acted on in preparing budgets in this department.

"The figures under Public Works, ordinary and special, have been "dealt with at length by the Chief Accountant, but it is not easy to "say what are actual and what nominal savings. It seems, however, "that under the minor head Public Lighting large economies were "effected. The Municipal Commissioner gives the actual savings on "the budget as Rs. 5,07,668 and the nominal savings as Rs. 5,44,728; "the latter sum has been renewed in the current year's "budget. The Auditors animadverted on this practice in their "report last year, and Government then pointed out its drawbacks. "In so far as the grants renewed are on account of works com-"menced or debts really incurred, there can be no objection to "provision being made; but the entry, year after year, of items on "which no immediate expenditure appears to be seriously contem-"plated is only calculated to obscure the real financial position of "the Municipality."

At pages 90 to 98 of the report, the Chief Accountant has shown the details of the total unexpended balance under each budget head and the amount required to be renewed out of such balance; the remainder in each case is the real saving. In a summary at page 98 the amounts requiring renewal and the real savings are given as clearly as it seems possible to give them.

The saving under the head of Public Lighting has been fully explained at pages 14 and 92 of the Administration Report, and any further allusion to it here would be out of place.

With regard to the question of renewing lapsed grants, no one can dissent from the views expressed in the Resolution. Appended to this memo. is a detailed statement, of which a copy was submitted to the Standing Committee under the Commissioner's No. 9970 of 5th August 1892, of lapsed grants forming the aggregate of Rs. 5,44,727-14-1 referred to in the Resolution.

To begin with, it may be pointed out that Rs. 1,76,930-3-1 of this amount under the head of Debt consists of interest or of the value of paid-off debentures which should have been, but were not,

claimed by the parties to whom they were due within the year. For this the Municipality is clearly not responsible. This reduces the sum of the lapsed grants to Rs. 3,67,797-11-0.

A perusal of the statement (Appendix **A**) will show that the following items alone fail to come under the category of "works commenced or debts really incurred":—

	Rs.	a.	p.	Rs.	a.	p.
VICTORIA GARDENS.						
Section I—Establishment	299	9	11			
„ II—Stores and petty charges	1,771	3	3			
„ III—Seeds, plants, &c.	360	9	10			
„ IV—Monsoon repairs, &c.	952	14	7			
				3,384	5	7
(*N.B.*—The remaining works mentioned in the statement under Victoria Gardens were all under construction, except the wild beasts' cage.)						
ENGINEER'S DEPARTMENT.						
Road Watering.						
Water tanks and Persian wheels				8,227	1	9
New Works.						
Filling and pitching at Haines Road				4,593	2	5
Tanks and hose for Arthur Crawford Markets				9,294	0	0
Bas-relief and tympanum at do.				4,240	0	0
Stove or tank for dipping pipes at Chinchpokli				1,292	5	0
				Rs. 31,010	14	9

The first item of Rs. 3,384-5-7 forms part of, and is credited to, the Garden Fund, duly constituted by the Corporation under section 121 of the Municipal Act, and is therefore rightly renewed.

Out of the second item of Rs. 8,227-1-9, a sum of Rs. 7,673 was sanctioned for expenditure in 1892-93, though it was anticipated that the expenditure of the whole would be necessary. The further renewal of the insignificant balance of the grant would be perhaps questionable, but that it was not all spent as soon as provided is due to the fact that the tanks and wheels stood better than was expected.

The reason for the non-expenditure of the sum of Rs. 4,593-2-5 for filling and pitching at Haines Road is explained in the margin of the statement, but it may be observed that the work has now been taken in hand.

The reason why the grant of Rs. 9,294 for tanks and hose for the Arthur Crawford Markets was not expended is that the original scheme was, under the advice of the Chief of the Fire Brigade, held in abeyance till the effect on water pressure of the opening of the Tansa Water Works was ascertained. The result has been that the work, which is now in progress, will cost much less than was originally anticipated.

The expenditure on the bas-relief and tympanum at the Arthur Crawford Markets was sanctioned, and an attempt was made to put it in hand, but it was found that it would cost a good deal more than the grant and action was suspended. This grant and the next one for a dipping tank at Chinchpokli have been rather purposelessly renewed, and should be both excluded from the statement for 1892-93 which has yet to be submitted to the Standing Committee.

The above details show that, under the test laid down by Government, the last two grants (Rs. 4,240 + Rs. 1,292-5-0 = Rs. 5,532-5-0), and perhaps a few hundred rupees out of the grant for water tanks and Persian wheels are the only ones, the renewal of which can be objected to. If we go a few years back, it will be found that the present total shown in Appendix **A** compares very favourably with the totals of former times. For instance, in 1884-85 the lapsed grants renewed amounted to Rs. 6,65,803, in 1885-86 to Rs. 9,84,524, and in 1886-87 to Rs. 11,42,824, as compared with Rs. 5,44,728 in the year under report.

Para. 6.

"The figures for the last five years are given below and com-
"pared with the loans actually raised :—

	Loans raised.	Expenditure on Loan Works.
	Rs.	Rs.
1887-88	43,00,000	23,68,847
1888-89	34,70,500	31,92,096
1889-90	32,32,000	43,97,338
1890-91	61,01,000	45,77,791
1891-92	33,53,000	34,20,539
Total ...	2,04,56,500	1,79,56,611

"The sums invested in the Bank of Bombay and in securities is "shown as Rs. 83,57,758, and a large portion of this—how much "exactly it is difficult to ascertain—represents unspent balances "of loans raised. It seems probable that the Municipality has "of late years borrowed more than was necessary, and the fact "that it must, for much of the balance referred to, be paying more "interest than it receives tends to discount very considerably "the credit taken in the reports for prudent administration of "investments."

At page 17 of the Administration Report the Commissioner shows a sum of Rs. 83,57,757-9-1 as "Investments of surplus, "current and loan balances and of sinking and building insur-"ance, &c., funds, and cash (in Bank and Office Treasuries)." The exposition of the items which made up this great sum was a necessary duty of the Chief Accountant, and it will be found that he has performed it in statement 5, pages 180-181 of his report. He there

shows a cash balance of Rs. 1,83,604 and investments amounting to Rs. 81,74,154, or Rs. 83,57,758 in all. The details of the investments are fully given and are as under :—

	Rs.	Rs.
(1) Surplus Cash	21,02,360	
Tansa Loan interest account surplus ...	7,51,005	
		28,53,365
(2) Loan Balances—		
Rs. 26,94,000 Drainage Loan of 1878 (Municipal Bonds)	48,000	
44 lakhs Sanitary Works Loan (Government Paper).	6,55,549	
7 lakhs do. do. (Municipal Bonds).	1,20,000	
12 lakhs Drainage and Water Works Loan (Government Paper)	2,54,044	
Miscellaneous Works, Rs. 10,08,500 (Government Paper)	99,625	
Agripada H. S. W. Connection Loan, Rs. 2,48,000 (Municipal Bonds) ...	1,70,000	
35 lakhs Sanitary Works Loan (Government Paper)	16,54,835	
8 lakhs Municipal Building Loan (Municipal Bonds)	8,00,000	
147 lakhs Tansa Loan (Municipal Bonds)	2,65,000	
		40,67,053
		69,20,418
(3) Sinking Fund—		
For 6 °/₀ Loans (cash deposited at Bank of Bombay)	1,500	
„ 5 °/₀ Loans ... { Municipal Bonds, Rs. 4,24,500 / Cash... „ 248 }	4,24,748	
	4,26,248	
(4) Municipal Buildings Fire Insurance Fund—		
Municipal Bond ... ... Rs. 9,000		
Cash ... ... „ 388		
	9,388	
		4,35,636
		73,56,054
(5) Government, Municipal, and Port Trust Paper deposited at the Bank belonging to Contractors and others		8,18,100
Rs. ...		81,74,154

The investments of loan balances are also shown at pages 100-101 of the report. Both these statements seem as clear as it is possible to make them, and it is not understood how any difficulty could have attended the ascertaining from them with exactitude what the unspent balances of loans actually amount to, if the report was read with care and attention.

It will be observed that the above statement shows unspent balances of loans amounting to Rs. 40,67,053. Of this sum, Rs. 14,03,000 are invested in our own 5 per cent. paper, and on this portion at all events we are not paying more interest than we

receive. The balance is Rs. 26,64,053 only. It will be advisable, however, that some explanation should be attached with regard to each loan to account for the existence of the balance of that loan, and this has been done in Appendix **B**.

With regard to the first three of the five years referred to by Government, it may be observed that we borrowed 110 lakhs against an expenditure of 105 lakhs, and that the balance did not suffice to meet loan works requirements up to the monsoon of the following year. The Chief Accountant explains this in para. 4 of his report No. 1106 of 30th June 1891, written on the Government review of the Administration Report for 1389-90, from which we quote the following passage:—

"As regards our borrowing loans in excess of actual expenditure, "I may state that we had to raise in 1887-88 funds sufficient, not "only for that year, but to last us till the rains of the following "year. Moreover, the actual work done in 1887-88" (on the Tansa Works) "was less than anticipated owing to the "progress of the Duct Works not being up to what it should "have been. In addition to the expenditure actually adjusted "in the three years referred to, Rs. 5½ lakhs were advanced "for remittance to pipe contractors and to the dam and duct con- "tractors for materials brought on the ground, plant, &c. Thus "the actual expenditure was 105 lakhs against the borrowed "amount of 110 lakhs; this left only a balance of five lakhs, which "was not sufficient to meet expenses up to August 1890, and "consequently we had to advance a very large sum from current "and other balances for Tansa expenditure in the early part of last "year, as the usual annual instalment of 25 lakhs was only raised "in August and September 1890."

The explanation with regard to the fourth year, 1890-91, has already been given. It was the difficulties which attended the acquisition of land for the Pawai Works and for roads which kept so long on our books the large balance of the 35 lakhs loan of 1890-91. In the fifth year more was spent than was raised. The difference (15 lakhs) over the whole period of five years between the sums raised and the sums spent is, it will be seen, amply accounted for by the difficulties attending land acquisition, which have been just referred to.

A careful mastery of details and a general purview of facts and figures seem to lead inevitably to the conclusion that there has been no inconsiderate borrowing on the part of the Municipality and that where sums borrowed have not been spent, it has been entirely owing to causes beyond our control. It will not be out of place, however, to make a passing reference to the difficulties which have hampered the Municipality in past years in raising loans, whether in such amounts as were strictly required or at times convenient to themselves, and we annex in Appendix **C** certain correspondence which is relevant to this point, and which illustrates the inconvenience which has attended loan operations from the restrictive regulations of Government. It will be observed that the

inconvenience was admitted and some effort made to remedy it. Having to announce far ahead of our actual requirements the loans which we intend to raise, it is obvious that we cannot fix their amount relatively to those requirements with the same precision as if we were not obliged to do so; and beyond this cause there are numerous reasons to account in given cases, and which more or less apply in every case, for expenditure after the loan has been raised being delayed beyond what was anticipated when it was announced, and these have been specifically alluded to in the course of this memo.

Para. 7.

"In conclusion, His Excellency in Council can only remark "again, as last year, that it is practically impossible to ascertain "from the information given the exact financial position and "prospects of the Municipality."

This criticism will perhaps be best considered when the Accountant-General's suggestions for amending our accounts are before the Standing Committee. We may say here that our present system of accounts has been in existence for more than twenty years, and it is a little strange that it should only have been found out to be unintelligible two years ago. There have been alterations here and there of detail and additions under the new Act, but the system is practically that introduced by Mr. (now Sir) Theodore Hope, one of the best accountants who ever belonged to the Civil Service.

It seems to us that the comment is hardly a fair one, and the case cited under para. 6 seems to us to indicate that in point of fact the details given have not been studied with that care which it is obvious must be required before accounts relating to such large transactions can be mastered.

The Sub-Committee in submitting this report think it desirable to call the attention of the Standing Committee to the constitutional question involved.

No power or authority is given to the Government by the Municipal Act to interfere in the conduct of Municipal Finance to which alone the Government Resolution is confined. In this respect there is a distinct difference between the Bombay (City) Municipal Act and that for the Municipalities in the Mofussil (Act II of 1884) where complete powers of control are given to Government and procedure for enforcing that control is provided. It may no doubt be said that any criticism on the part of higher authority on Municipal action is to be welcomed; but the Sub-Committee are at the same time of opinion that it should be distinctly understood that such criticism will in future be received not as given in exercise of a right, but as in the nature of friendly advice.

G. W. ROUGHTON.
FAZALBHOY VISRAM.
K. M. SHROFF.

BOMBAY, 25*th July* 1893.

I dissent from the spirit of this Report.

JAVERILAL U. YAJNIK.

APPENDIX A.

LIST of lapsed Grants for 1891-92 (payable out of Current Revenue), which require to be renewed during 1892-93.

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Corporation and Standing Committee's Establishment.						
Section IV.—Contingencies, &c., Bills from Messrs. Thacker & Co. and Mr. Husonally Abdoolally and the *Times of India* for paper weights and inkstands supplied in February 1892 and for charges for binding files of Proceedings and printing Coat-of-Arms		2,660 1 11		996 6 8	1,663 11 8	Bills received after the close of 1891-92.
Assessment and Collection Department.						
Section I.—Head-quarters Office—For cost of acting arrangements made during the absence of the 2nd Assistant Assessor who was allowed 80 days' privilege leave from 18th February 1892 and for pay for February 1892 due to a Registration Clerk who proceeded on 1 year and 4 months' furlough from 17th February 1892...		623 13 1		403 1 7	220 11 6	The pay-sheets were submitted in 1892-93.
Licensing Establishment.						
Section IV.—Land Conveyance License Establishment—Establishment, &c., charges for January and February 1892		2,015 18 2		2,015 18 2		The statements of establishment and contingent charges for January and February 1892 have not yet been received.

Fire Brigade.											
Section II.—Rent, Repairs and Miscellaneous.—Stores and Stationery—Bills from the *Times of India* for printing charges for January and February 1892 and for cost of stores supplied by Messrs. Merryweather & Sons	1,068	9	2			457	6	11			Bills received after the close of 1891-92.
,, *III.—Purchase of Stock.*—One steam-fire engine...	9,500	0	0			9,500	0	0			The engines and manuals arrived in Bombay at the close of 1891-92 and were tested in 1892-93.
,, *IV.—Purchase of three steamers and two manuals*	31,500	0	0			31,500	0	0			
				42,068	9 2				41,457	6 11	611 2 3
Public Gardens.											
A.—*Victoria Garden.*											
Maintenance.											
Section I.—Establishment	299	9	11			299	9	11			
,, II.—Stores and petty charges	1,771	3	3			1,771	3	3			
,, III.—Seeds and Plants and labelling Plants and printing Catalogues.	360	9	10			360	9	10			
,, IV.—Monsoon repairs, painting seats, &c., and repairs to buildings, &c.	952	14	7			952	14	7			
	3,384	5	7			3,384	5	7			
New Works.											
Special repairs and alterations to Victoria Garden Roads	496	9	2			496	9	2			
Wall and fencing round the Victoria Garden ...	1,322	10	0			1,322	10	0			
Quarters for the garden staff	381	9	2			381	9	2			
Laying 12" stoneware pipes in the Victoria Garden	163	5	2			163	5	2			
Constructing Ostriches' shed in the Victoria Garden	100	7	11			100	7	11			
Carried over ...	2,464	9	5			2,464	9	5			
Carried over ...	3,384	5	7	47,368	5 4	3,384	5	7	44,872	11 11	2,495 9 5

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...	8,384 5 7	47,368 5 4	3,384 5 7	44,872 11 11	2,495 9 5	
Brought forward ...	2,464 9 5		2,464 9 5			
New Works—contd.						
Constructing Deer shed in the Victoria Garden.	15 8 0		15 8 0			
Do. Aquatic birds' cages	221 6 5		221 6 5			
Do. Cages for small mammalia ...	239 6 8		239 6 8			
Do. do. do. ...	52 10 4		52 10 4			
Do. Bears' cage	545 8 11		545 8 11			
Do. a wild beast's cage	3,970 1 11		3,970 1 11			
Cost of constructing a new bungalow for the Superintendent, Victoria Garden	11,030 5 1		11,030 5 1			
Erection of a refreshment room in the Victoria Garden	2,107 10 3		2,107 10 3			
Construction of a drain for the cages in the Victoria Garden	1,649 7 6		1,649 7 6			
Erection of a 3-chamber latrine on the water closet system in the Victoria Garden... ...	1,396 0 0		1,396 0 0			To be renewed to the credit of the Garden Fund for completion of works and improvements.
	23,692 10 6	27,077 0 1	23,692 10 6	27,077 0 1		
Engineer's Department.						
General Supervision and Miscellaneous Duties.						
Section I.—Superior Staff—For amount of acting allowances due to Messrs. Smith and James for February 1892...		1,019 5 9		666 10 8	352 11 1	The sanction of the Corporation and Government to the acting arrangements in place of the Executive Engineer who is on sick leave was received in April 1892.
Drainage A, Miscellaneous Drainage.						
Section II.—Inspecting Manholes and Sewers and cleaning Miscellaneous Drains and Gutters, Stores Bills for hand lamps, &c., ordered out from England in 1891-92	373 2 4		373 2 4			Bills not yet received.

III.—*Repairing* and altering Miscellaneous Drains and Gutters ...	4,260	9	0				2,967	14	5				Repair works sanctioned in 1891-92 are in progress.
IX.—Altering Sewer arrangement in Falkland Road...	5,098	5	6				5,098	5	6				Works in progress. The sewer arrangement cannot be carried out until some Government property which intervenes is removed and land from certain private parties acquired.
				9,732	0	10				8,439	6	3	1,292 10 7
B.—Maintenance of Love Grove Pumping Station.													
Section III.—Repairs to Machinery	836	15	4				836	15	4				Some of the bills for works entrusted to Messrs. Richardson & Cruddas are still to be received.
„ V.—Repairs to Buildings	337	13	7				337	13	7				Bills for repairs sanctioned in 1891-92 are to be received.
				1,174	12	11				1,174	12	11	
D.—Maintenance of Carnac Bunder Pumping Station.													
D.—Renewing the quarters of the Pumping Engine Staff ...				3,000	0	0				3,000	0	0	Work completed in 1892-93.
Water Works—Maintenance.													
Section IV.—A—Repairs, alterations and other works in connection with tanks, wells and fountains...	5,072	1	9				4,163	12	11				The alterations are in progress.
IV.—B—Repairs to Water Works buildings	3,585	8	6				3,585	8	6				Required for painting the roof of the Malabar Hill Reservoir filters and for charges for repairs executed last year, bills for which were not submitted during the past year.
V.—Repairs to Tulsi Main Embankment	22,072	0	8				22,072	0	8				Work completed in July 1892, except earthwork, contract for which is still to be let.
V.—A.—Repairs to Vehar Main Embankment between Sion and Kurla	9,841	11	11				4,249	11	5				Work completed in June 1892.
				40,571	6	10				34,071	1	6	6,500 5 4
Carried over ...				1,29,942	15	9				1,19,301	11	4	10,641 4 5

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...		1,29,942 15 9		1,19,301 11 4	10,641 4 5	
Streets and Buildings.						
Public Lighting Branch.						
Section II.—Gas lighting—F. Contingencies—For cost of 7 dwarf columns and lanterns to be supplied and erected on Ollivant Bridge and for cost of 2 automatic pressure gauges	3,410 13 7		1,179 0 0			One of the pressure gauges has been supplied in 1892-93. The other is still to be supplied. The columns and lanterns are in course of erection.
„ III.—Kerosine oil lighting—B. Contingencies—For cost of providing masonry foundations to kerosine oil lamp posts	5,022 12 2		3,022 8 5			The annual repairs Contractor's bill was received in 1892-93.
		8,433 9 9		4,201 8 5	4,232 6 4	
Road Watering.						
„ V.—New water tanks and Persian wheels		8,227 1 9		8,227 1 9		Several water tanks and Persian wheels have been in bad condition for some time, but by occasional repairs they have been made to last until the present time. This year, however, many renewals will have to be made, and hence it is necessary that the grant be renewed. There is no grant for the purpose in this year's Budget.

Road Repairs and Maintenance.															
Section III.—Paving footpaths	38,270	8	4				38,270	8	4						Work in progress.
„ IX.—Roadside trees, fencing, &c., for cost of new tree guards supplied by Messrs. Richardson and Cruddas	1,176	11	0				1,155	0	0						Bills received in 1892-93.
				39,447	3	4				39,425	8	4	21	11	0
Street Improvements.															
Section I.—Compensation for ground taken up.	55,635	8	6				35,055	8	6						The grant is required to be renewed on account of unpaid compensation for plots of lands acquired for street improvement.
„ III.—Purchase of number-plates and street-boards	4,551	2	8				4,551	2	8						Contracts entered into, but bills not preferred as the plates and boards have not been supplied.
				60,186	11	2				39,606	11	2	20,580	0	0
New Works.															
Storm-water drain in Juggonath Sadashiva Street	1,634	12	4				1,634	12	4						Work completed in 1892-93.
Six cast-iron man-hole frames and covers on 12″ pipe drain at Matharpakadi	291	0	0				291	0	0						Do. do.
Storm-water connection at the junction of DeLisle and Arthur Roads	106	6	7				106	6	7						Work in progress.
Storm-water drain in Gorupdeo Road	376	6	7				376	6	7						Work completed. Bills for road repairs, &c., to be adjusted.
Chawl of 17 rooms at Love Grove	9,248	7	8				9,248	7	8						Work in progress.
Closing up with cast-iron the perforations in man-hole covers	3,776	6	1				3,776	6	1						Do.
Renewing side drain in Love Lane	282	8	6				282	8	6						Work completed in 1892-93.
Making fair weather connections of Agripada open drain with Ripon Road sewer	261	5	0				261	5	0						Work nearly completed.
Converting the chunam shed at Churney Road Chowki into a new Chowki	668	7	7				668	7	7						Work in progress.
Miscellaneous Drainage	1,464	12	10				1,464	12	10						Works sanctioned in 1891-92 are in progress.
Carried over ...	18,110	9	2	2,46,237	9	9	18,110	9	2	2,10,762	4	0	35,475	5	9

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...	18,110 9 2	2,46,237 9 9	18,110 9 2	2,10,762 4 0	35,475 5 9	
New Works—contd.						
Arrangements for flushing Parel and Bellasis Road Storm-water drain from Babula tank and Nagpada tank	1,984 3 8		1,984 3 8			Work in progress. There was not sufficient time in the last dry season to complete both the works. The flushing arrangements in connection with the Babula tank have been completed. Those in connection with the Nagpada tank will be undertaken after the rains and some subsidence of the subsoil water.
Water entrances at different places	1,815 6 0		1,815 6 0			All the water entrances have been completed. The work of filling in portion of the Aitken Low Level sewer is in progress. Some charges for the water entrances have already been passed this year.
Filling and pitching slopes of portion of Haines Road which forms the boundary of the Storm-water Reservoir	4,593 2 5		4,593 2 5			Work not undertaken, pending consideration of Mr. Baldwin Latham's proposals as to Storm-water Drainage.
Altering connection of main drain with main sewer at Bellasis Bridge	114 9 4		114 9 4			Work completed, but accounts remain to be adjusted.
Ventilating shafts, Marine Lines, Mayo Road and Queen's Road	2,092 3 8		2,092 3 8			Work nearly completed and accounts remain to be adjusted.
Construction of 12" pipe sewer in extension of the Arthur Road 15" pipe sewer to Suparibaug Road	2,956 0 0		2,956 0 0			Work nearly completed and accounts remain to be adjusted.

19	*Construction of 3 flushing tanks with automatic annular siphons for Mayo Road and Marine Lines pipe sewer*	*803*	*1*	*5*			*803*	*1*	*5*				*Do.* do. do.	
	Latrines and urinals	*36,222*	*15*	*7*			*25,422*	*13*	*0*				Work in progress. In some cases sites for latrines and urinals have been objected to by persons residing in the locality and in other cases negotiations are proceeding in respect of land to be acquired.	
	Six-chamber latrine and six-chamber urinal at the junction of Falkland Road and Gilder Street	4,021	3	8			4,021	3	8				Work in progress.	
	Four-chamber urinal in 2nd Bhoiwada Street...	524	0	0			524	0	0				Do.	
	Four-chamber urinal at the corner of Khoja Street and Grant Road	480	0	0			480	0	0				Work in progress. The site selected for the urinal was objected to by the Manager of an Agiari in the neighbourhood. A new site has since been selected and the work is now taken in hand.	
	Latrine at Bandora Slaughter House	1,898	13	5			1,898	13	5				The work is completed, but some accounts remain to be adjusted.	
	New Night-soil Depôt at the north end of DeLisle Road	15,984	7	9			15,984	7	9				Work in progress. The site proposed for the depôt was objected to, but a new site has now been selected and a contract let for the work.	
	Addition to latrines in Municipal Workshops store-yard	1,305	0	0			1,305	0	0				The work was modified, and it was decided in May 1892 that one native water system latrine and one European water closet should be erected in lieu of the additions at first intended.	
	Retaining wall at Walkeshwar Road	466	12	6			466	12	6				Work practically completed, but it is anticipated that some further work will be found necessary after the rains.	
	Carried over ...	93,372	8	7	2,46,237	9	9	82,572	6	0	2,10,762	4	0	85,475	5	9	

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...	93,372 8 7	2,46,287 9 9	82,572 6 0	2,10,762 4 0	85,475 5 9	
New Works.—contd.						
Tank and hoses for the Arthur Crawford Market to be used in case of fire	9,294 0 0		9,294 0 0			Drawings and estimates have been prepared for tanks and hose at all the Municipal markets and will shortly be submitted for approval.
Bas relief and tympanum at the Arthur Crawford Market	4,240 0 0		4,240 0 0			The grant sanctioned for the work is insufficient.
Purchase of land for new Cross Road from Ripon Road to Byculla	1,355 7 0		1,355 7 0			All the land has been acquired, but some accounts remain to be adjusted.
Pointing with Indian patent stone the walls of the settling and distributing basins of the Bhundarwada Reservoir	40,687 6 0		40,687 6 0			Work in progress.
Lithographing copies of plans of water mains..	307 4 0		150 0 0			Bill received in May 1892.
Additional catch-water channels at Vehar ...	600 0 0		600 0 0			Claims for compensation for land taken up not yet settled.
Construction of a chawl at Vehar	1,551 3 9		1,551 3 9			
Construction of a stove or tank for dipping pipes at Chinchpokli	1,292 5 0		1,292 5 0			As there was no large quantity of old pipes requiring treatment, the construction was delayed. The tank will shortly be needed, and its construction will now be taken in hand.
		1,52,700 2 4		1,41,742 11 9	10,957 6 7	
Public Health Department. Conservancy Branch.						
Section IV.—Repairs.—For metalling the yard of the Health Department stables in 10th Kamathipura Street and for repairs executed during 1891-92	6,247 8 8		1,203 5 4			Annual repairs Contractor's bills received in April 1892. The work of metalling the yard of the stables in 10th Kamathipura Street is in progress.

Section X.—*Halalkhor Branch—E. Repairs—For metalling the yard of the Health Department stables in Khurshedji Suklaji Street and for repairs executed to different Night-soil Depôt stables and chawls during 1891-92*	5,154	1	0				1,459	10	9				Annual repairs Contractor's bills received in April 1892. The work of metalling the yard of the stables is in progress.
" " " J. Cost of providing proper bathing and drainage arrangements to the chawl at Dadar	1,747	0	0				1,747	0	0				
				13,148	9	8				4,410	0	1	8,738	9	7	Work nearly completed.
Markets and Slaughter-houses.																
" IX.—Repairs—For repairs executed to markets and slaughter-houses during 1891-92 for making alterations to the existing gates at the Pedder Market and for painting the machinery of the Crawford Market clock ...				4,128	7	10				1,056	2	11	3,072	4	11	Annual repairs Contractor's bills received in May 1892.
Infectious Diseases.																
Two disinfecting chambers				2,000	0	0				2,000	0	0				Work commenced in 1892-93.
Census				1,753	14	3				1,753	14	3				
Alterations in the Pydhowni Police Station ...				328	0	0				328	0	0				Work is in progress.
Carried over...				4,20,296	11	10				3,62,053	1	0	58,248	10	10	

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward...		4,20,296 11 10		3,62,053 1 0	58,243 10 10	
Education.						
School for Deaf and Dumb Mutes	150 0 0		150 0 0			The bill was received in April 1892.
Victoria and Albert Museum—Special repairs to the Museum	3,536 0 0		3,536 0 0			The work is in progress.
		3,686 0 0		3,686 0 0		
Hospitals, &c.						
Leper Asylum at Matoonga (Maintenance)—For clothing, &c., purchased for the inmates of the Asylum		2,060 0 2		1,798 10 0	261 6 2	The bill was received on 27th May 1892.
Cost of engrossing on vellum and of binding the Address of Condolence to Her Majesty the Empress of India on the death of H. R. H. the Duke of Clarence and Avondale and of telegraphing the purport of the Address.						
Bill from the *Times of India* for printing the Address		453 6 0		260 0 0	193 6 0	Bill received in April 1892.
Debt.						
Interest on Loans.						
Drainage Loan of 1878	16,862 8 0		16,862 8 0			
44 Lakhs Sanitary Works Loan	23,975 0 0		23,975 0 0			
7 Do. do.	19,112 8 0		19,112 8 0			
Tansa Water Works Loan...	1,18,264 12 6		51,264 12 6			The interest was not claimed during 1891-92.
Drainage and Water Works Loan of 12 lakhs...	12,050 0 0		12,050 0 0			
35 Lakhs various Sanitary Works Loan ...	46,648 12 6		45,067 8 4			
6 Per cent. Local Loans	97 14 8		97 14 3			
	2,37,011 7 3		1,68,430 3 1			
Repayment.						
Drainage Loan of 1878	8,500 0 0		8,500 0 0			Debentures for Rs. 8,000 have been paid off during 1892-93 and the balance has not yet been claimed.
		2,45,511 7 3		1,76,930 3 1	68,581 4 2	
Grand Total...		6,72,007 9 3		5,44,727 14 1	1,27,279 11 2	

APPENDIX B.

Explanation of unexpended Loan Balances invested in Government Paper or Municipal Bonds aggregating Rs. 40 lakhs and 67 thousand.

Invested Balances.	*Explanation.*
(1) Rs. 48,000 in 5 °/₀ Municipal Debentures at par, being unexpended balance of 27 lakhs Drainage and Water-Works Loan of 1878. * Rs. 14,378.	(1) This unexpended balance is partly required for the payment of the cost of laying pipe sewers in narrow lanes in the 1st Drainage Section now occupied by storm-water drains, which work cannot be proceeded with until the question of constructing house-connections in the City is decided by the Corporation and part* of it being a saving has been sanctioned to be appropriated for completion of certain water-works which have not yet been taken in hand.
(2) Rs. 6,55,548-10-4 in 4 °/₀ Government Paper for Rs. 6,70,000, being unexpended balance of 44 lakhs Sanitary Works Loan of 1885-86.	(2) Against this balance Rs. 31,303-12-5 were advanced from Surplus Cash up to 31st March 1892 and Rs. 1,62,174-14-3 were expended during 1892-93. The remaining sum of Rs. 4,62,069-15-8 is required for the completion of the work of constructing house-connections, 1st Drainage Section, which has been stopped pending the final decision of the Corporation on this most difficult question and for other drainage, &c., works undertaken out of savings. It may, however, be mentioned that iron and other house-connection fittings of the value of over Rs. 3¼ lakhs have, with the Corporation's sanction, been obtained and held in stock paid for by advances against this loan from Surplus Cash Balance.
(3) Rs. 1,20,000 in 5 °/₀ Municipal Debentures at par, being unexpended balance of 7 lakhs Sanitary Works Loan.	(3) Against this balance Rs. 19,530-14-10 were advanced up to 1891-92. Out of the remaining sum of Rs. 1,00,469-1-2, which has been saved on all the works sanctioned out of this Loan, Rs. 49,934-0-5 are required for the completion of the Drainage and Water-Works already sanctioned out of such savings and the balance of the savings, Rs. 50,535-0-9, is still available for re-appropriation.
(4) Rs. 2,54,043-12-0 in 4 °/₀ Government Paper for Rs. 2,55,000, being unexpended balance of 12 lakhs	(4) Against this balance Rs.9,791-15-9 were advanced up to 1891-92 and Rs. 11,441-13-0 were expended during 1892-93. Out of the balance of

Drainage and Water-Works Loan of 1888.

Rs. 2,32,809-15-3 about Rs. 5,000 will be required during 1893-94 for the completion of certain house connection works undertaken departmentally and the balance having been saved on the Queen's Road house connection works is available for re-appropriation. The contract rates for this work were unexpectedly favorable, and as the work was practically all in gullies, it was anticipated that it would prove much more difficult and expensive than turned out to be the case.

(5) Rs. 99,625 in 4 °/₀ Govt. Paper for Rs. 1,00,000, being unexpended balance of Rs. 10,08,500 Miscellaneous Works Loan.

(5) Including the advances of over 3 lakhs of rupees made out of this Loan for certain other works sanctioned by the Corporation, which will be replaced as soon as the necessary loans are raised on account of such works, the unexpended balance of this loan on 31st March 1892 amounted to Rs. 4,14,229-13-4, against which Rs. 3,405-1-7 have already been paid during 1892-93. The balance of Rs. 4,10,824-11-9 is principally required for—

(1) The new market at Colaba, for which plans and estimates are being prepared, the site having only recently been acquired ;

(2) The extension of the Mutton Market in the Arthur Crawford Market, which work is now proceeding ; and

(3) The road through Nowroji Hill, negotiations for the acquisition of land for which are at a standstill under circumstances with which the Corporation are familiar and which are at present insoluble.

(6) Rs. 1,70,000 in 5 °/₀ Municipal Debentures at par, being unexpended balance of Agripada House Sullage Water Connections Loan of Rs. 2,48,000.

(6) Against this balance Rs. 54,767-2-0 were advanced up to 1891-92 and Rs. 88,676-5-3 have further been spent during 1892-93. The balance Rs. 26,556-8-9 is required for the completion of the house connection works, which are stopped at present pending the final decision of the Corporation.

(7) Rs. 16,54,835-8-0 in 4 °/₀ Government Paper for Rs. 16,04,100, being unexpended balance of 35 Lakhs

(7) In consequence of the prices of land required for roads in Agripada and elsewhere, for which a provision of 15 lakhs was included in this loan, having been only

Various Sanitary Works Loan.	recently settled, Rs. 11,71,849-0-1 were expended during 1892-93, including advances of about Rs. 2,50,000 made for the purchase of frontage land at Agripada, &c., in excess of the original allotment of Rs. 15 lakhs to be recouped by subsequent sales. Since the above balance was shown, about 5 lakhs of this loan raised for Pawai land and other works, such as Bhuleshwar Market extension, &c., which were not immediately required for these works, have been utilized for other works sanctioned by the Corporation. This sum will be replaced when the necessary loans for the latter works are sanctioned.
(8) Eight Lakhs Municipal Building Loan—Rs. 8,00,000 in 5 % Municipal Debentures at par.	(8) Against this balance Rs. 1,11,982-5-10 were advanced up to 31st March 1892 and Rs. 4,41,539-8-4 have been expended during 1892-93. The balance will be paid off during 1893-94 on the final completion of the building. As the Bonds carry 5 per cent. interest, there will be no loss to the Municipality.
(9) Rs. 2,65,000 in 5 % Municipal Debentures at par, being the unexpended balance of Tansa Water-Works Loan of Rs. 147 lakhs.	(9) These debentures have already been transferred to Surplus Cash to replace advances made during 1891-92 and 1892-93 to meet payment on account of the Tansa Works.

It may be mentioned here that it is intended, in the case of investments Nos. 2, 4, and 5 in 4 per cent. Government Paper, to replace them by investments in 5 per cent. Tansa and Municipal Building Loan Bonds belonging to Surplus Cash by selling the Government Paper as soon as cash is required for current or other expenditure during the rains and transferring Municipal Debentures of equal value to the respective accounts.

APPENDIX C.

Extract from the Commissioner's No. 16386, *dated 9th February* 1888, *addressed to Government.*

In the case of the Tansa Works the complete project has been approved of by Government, and I respectfully urge that there is now no longer any reason for Government to withhold their sanction to raise the balance required to complete the 123 lakhs loan, the estimated cost of the project—this balance to be raised in such instalments between 1888 and 1892 as the Municipality may find necessary for the works. Supposing, however, that Government find themselves unable to adopt this view, then I request that Government will accord sanction to raise 25 lakhs of the Tansa Loan between 1st August 1888 and 15th January 1889 for expenditure in the end of 1888 and 1st half of 1889.

In connection with this I beg to draw attention to my letter No. 13705 of 16th December 1887 on the subject of leaving the Municipality free to raise the instalments of these loans on such dates as they may find advan-

tageous, having regard to market rates. Instead of being tied down by the terms of the application to raise their loans on particular dates fixed so long beforehand that the advantage of favorable terms of the market cannot be reaped.

For the reasons explained in that letter I trust that it may not be necessary to fix the dates and amounts of instalments for the raising of the 25 lakhs now.

Should this point, however, be decided against me, then to avoid delay I will mention the following dates :—

8 lakhs	...	...	15th August 1888.
8 lakhs	...	...	1st October 1888.
9 lakhs	...	...	15th November 1888.

Extract from the Accountant-General's letter No. $\frac{A\,C}{81170}$ *of 13th March* 1888 *addressed to the Secretary to Government, General Department.*

The proposal to permit the Municipality to enter the market at any time convenient to them is opposed to clause 5 of rule 5 of the Rules of the Government of India, published under Bombay Government Notification No. 3091, dated 22nd August 1883, which requires that the date on which loans are to be taken up should be stated. It is important not to relax this rule, as otherwise the dates on which the Municipality may wish to float a loan might interfere with the dates on which the Government of India may wish to enter the market with a Government Loan.—I have, &c.,

A. C. TUPP,
Accountant-General.

Extract from Municipal Commissioner's No. 18538, *dated 17th March* 1888, *addressed to Government in reply to their No.* 872, *dated 16th March* 1888, *General Department.*

Replying to the Accountant-General's last para., I beg to urge that the comparatively small sums required annually by the Bombay Municipality can in no way injuriously affect the rates for the large loans required by the Government of India ; and further the Municipality, in order to obtain the best rates for themselves would always, if left free, avoid borrowing at the time advertized for the raising of a Government of India Loan.

No. 5619.

GOVERNMENT OF INDIA,
DEPARTMENT OF FINANCE AND COMMERCE,
ACCOUNTS AND FINANCE,
LOANS AND ADVANCES, &c.

TO THE CHIEF SECRETARY TO THE GOVERNMENT OF BOMBAY.

SIMLA, *22nd October* 1887.

SIR,—I am directed to acknowledge the receipt of your letter of the 13th August 1887, No. 2357, on the subject of the loan of 7 lakhs of rupees required by the Municipality of Bombay for drainage and other works.

2. In my letter of the 24th June 1887, No. 3344, it was pointed out that the requirements of the rules under which the loan was to be taken had not been complied with, and that compliance therewith was necessary before the Government of India could legally sanction the loan.

3. Although part of the requirements of the Government of India was met, as you now point out, by the notification of the 30th May, which published a corrected schedule of liabilities, the particulars mentioned in my letter of the 24th June, as requiring publication under the rules, have not yet been notified.

4. As the rules they refer to have the force of law, it is necessary that they should be at least substantially complied with. The question whether they have been so, however, hardly arises now, as the action of the Municipal Commissioner in borrowing the money from the Bank of Bombay without waiting for sanction has placed it out of the power of the Government of India to give legal authority to his proceedings.

5. Section 8 of Act XI. of 1879 (the Local Authorities Loan Act) prescribes that no local authority may borrow money except as provided by the Act and the rules made under it, and that any contract otherwise made shall be void.

Section 7 of the Act prescribes that authority to borrow must be given by the local Government with the previous sanction of the Governor-General in Council. As such sanction had not been given when the Municipal Commissioner borrowed the money from the Bank of Bombay, His Excellency in Council is advised that the contract between the Bank and the Municipality is legally void and that the retrospective sanction asked for by the Government of Bombay would not validate it and should not therefore be given.

6. The only course therefore now open to the Municipality is to arrange with the Bank of Bombay for a new loan by which they may repay the present one, and which should be raised in strict accordance with the law and the rules made under the law, and I am to request that this course may be adopted.

7. I am at the same time to invite attention to the necessity of strict adherence to the provisions of the law in these matters, and to point out that neglect of the prescribed procedure occasions delay and inconvenience in disposing of such proposals as the present; for the Government of India, instead of being in a position at once to consider and sanction a proposed loan on its merits, has to review various legal questions, as has been done in this case, in order to ascertain whether it can take action or not. If it is thought that the rules under the Local Authorities Loan Act are in some points too precise for the case of the large and important transactions of a Presidency Municipality, the Government of India will willingly consider any difficulties they give rise to and any proposals for their modification. The rules as they stand, however, have, as already pointed out, the force of law, and the Government of India is bound to act in accordance with them.—I have, &c.,

E. T. ATKINSON,
Officiating Secretary to the Government of India.

No. 13705 OF 1887-88.

16th December 1887.

TO THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT.

SIR,—With reference to para. 2 of Government Resolution in the General Department, No. 3446, dated 12th ultimo, I have the honour to state that Rule 5 of the Rules framed under "The Local Authorities Loan Act,

1879," requires to be amended so far as Bombay Municipal Loans are concerned. Sub-head 5 of Rule 5 requires the following particulars :—

(1) The period for which the loan is required ;
(2) The number and amount of the instalments, if any, in which it is proposed that the loan shall be taken ;
(3) The dates proposed for receiving such instalments ; and
(4) The instalments, if any, in which it is proposed to repay the loan.

There is no difficulty in giving the information required in clauses 1 and 4, *viz.*, the period for which the loan is required and the instalments in which it is proposed to repay it, because these particulars are settled at the outset before application is made for the loan ; but it will not be possible, without risk of great loss, to give the information required under heads 2 and 3, the number and the amount and the dates of the instalments to be received, because the number and the amount of the instalments generally depend upon the rapidity with which the works are executed, the rate of progress in the case of works, such as the Tansa scheme, costing 123 lakhs and extending over 6 years, not being capable of being exactly estimated beforehand, while the dates of receiving instalments depend both upon the balance in hand and the state of the money market, it being necessary to watch the market from day to day and to take advantage of favorable offers.

In order, therefore, to prevent the necessity of accepting instalments on a given date, whether they were required or not and whether favorable rates could be secured on that date or not, sub-head 5 of Rule 5 should be altered so as to admit of the Municipality raising the loan in such instalments as may be found necessary for the satisfactory progress of the works and at such dates during the year as may be found advantageous.

I suggest therefore that sub-head 5 should simply run—

" 5th. The period for which the loan is required and the instalments, if " any, in which it is proposed to repay the loan."—I have, &c.,

F. L. CHARLES,
Acting Municipal Commissioner.

Loans: Modification of Clause 5 of Rule V. of the Local Authorities Loan Act.
No. 1868.

GENERAL DEPARTMENT.

Bombay Castle, 31st May 1888.

Letter from the Municipal Commissioner for the City of Bombay, No. 13705, dated 16th December 1887—Stating, with reference to paragraph 2 of Government Resolution No. 3446, dated 12th November last, that Rule 5 of the Rules framed under " The Local Authorities Loan Act, 1879," requires to be amended so far as Bombay Municipal loans are concerned ; and making remarks and suggestions.

Letter from the Officiating Secretary to the Government of India, Department of Finance and Commerce, No. 2472, dated 11th May 1888 :—

"I am directed to acknowledge the receipt with your letter No. 358, dated the 1st February 1888, of the letter from the Municipal Commissioner for the City of Bombay, No. 13705, dated the 16th December 1887, representing the inconvenience to the Bombay Municipality of the requirement in Clause 5 of Rule V. of the Rules for the raising of loans by local authorities in the open market, published with the Notification of this Department, No. 2748 of 17th August 1883, under which the number and amount of the instalments in which it is proposed to raise a loan, and also the dates on which it is proposed to take them, must be specified.

"2. The Governor-General in Council has considered the proposal of the Municipal Commissioner that the specification of these particulars should be omitted from the rule, but is unable to accept it. His Excellency in Council is also advised that the interpretation of the rule suggested by the Government of Bombay cannot be adopted. As the rule expressly requires 'the number and amount of the instalments' and 'the dates proposed for receiving such instalments' to be shown, it cannot be said that a statement of the maximum amount of the instalments and of the maximum period within which they will be received, is a compliance with the rule.

"3. At the same time there is no doubt that the rule may be modified with some advantage, and it is probable that the rule amended as in the enclosed notification will sufficiently meet the difficulty which has been felt in Bombay."

RESOLUTION.—Copies of the letter from the Government of India should be forwarded to the Municipal Commissioner for the City of Bombay and the Accountant-General for information.

E. LAWRENCE,
Acting Under-Secretary to Government.

To

The Municipal Commissioner for the City of Bombay (with a copy of the notification),
The Accountant-General,
The Financial Department of the Secretariat.

No. of 188 .
Copy forwarded for information and guidance to

No. 2471.

GOVERNMENT OF INDIA,
DEPARTMENT OF FINANCE AND COMMERCE,
ACCOUNTS AND FINANCE,
LOANS, &c.

NOTIFICATION.

SIMLA, 11*th May* 1888.

In exercise of the powers conferred by Sections 5 and 7 of the Local Authorities Loan Act, 1879, the Governor-General in Council directs that for Clause 5 of Rule V. of the Rules for the raising of loans by local authorities in the open market, published with Notification No. 2748, dated 17th August 1883, the following Clauses (5) and (5*a*) be substituted :—

(5). The dates between which the money borrowed is to be received.

[NOTE.—It is essential that the authority to borrow in the market should be limited to a reasonable time as loans of any considerable amount cannot be held in suspense indefinitely. The dates, therefore, must be fixed with reference to this condition, and must not be so wide apart and so indefinite as practically to be no limitation.]

(5*a*). The term of years for which the money is to be borrowed, the instalments, if any, in which it is to be repaid, and the amount of Sinking Fund, if any, provided for its repayment.

E. J. SINKINSON,
Offg. Secretary to the Government of India.

Resolved : "That the report of the Sub-Committee of the Standing Committee on the Resolution of Government on the Municipal Commissioner's Administration Report for 1891-92, be approved and adopted, and that the same be forwarded to the Corporation as the report of the Standing Committee."

No. 4265.

Resolved : "That, as applied for by the Commissioner, in his letter No. 8763, dated 25th ultimo, sanction be given to the payment, to Bai Luxmibai, administratrix of her minor son Hasha Banga, of Rs. 10, being the amount of compensation for 30 trees, cut down on her ground at Nevada which had been hired for the erection thereon, of quarters for the Inspectors of the Tansa Department. The amount to be met out of the contingencies reserved in the final revised estimates of the cost of the Tansa works."

No. 4266.

Read letter No. 8441, dated 25th ultimo, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to state that frequent complaints having been received from the inhabitants of Lower Mahim about nuisance from quarrying sandstone by Municipal contractors, I instructed the Executive Engineer to prevent the current year's contractors from excavating sandstone in the prohibited districts in Lower Mahim in terms of their contract. The contractors, Messrs. Amroota Babaji, Vachaghandi, Bhedwar & Co., state that they have no objection to excavate sandstone in other than prohibited districts, but the sandstone obtained from them is of inferior quality, and consequently it is not approved of by the Executive Engineer. The Executive Engineer reports that it is absolutely necessary for the purposes of road repairs to obtain sandstone of a good quality, and adds that if the contractors are at once prevented from excavating sandstone in Lower Mahim, the road repairs will have to be carried out with inferior sandstone, or the work of road repairs stopped until suitable material is obtained from places outside the city. The former alternative proposed by the Executive Engineer cannot be allowed and the latter will take time to carry out, and it is impossible to paralyse road repairs all over the City. Under the circumstances, it is necessary in the public interest to allow the contractors to obtain sandstone from Lower Mahim, provided they fill up the holes afterwards, to provide for which the amount deposited by them should be increased by Rs. 3,000, for the faithful performance of their contract, and this the contractors agree to do.

If the above course is adopted the nuisance will be abated and the cause of complaint remedied. I have therefore the honour to request the sanction of the Standing Committee to the addition of a clause to the above effect on the original contract.—I have, &c.,

H. A. ACWORTH, Commissioner.

Resolved: "That sanction be given to a clause as
No. 4267. proposed by the Commissioner, in his letter No. 8441, dated 25th ultimo, being added to the original contract for the supply of sandstone, and that under the terms of section 69 (*e*) of the Municipal Act, the contract be varied accordingly."

Considered letter No. 8931, dated 29th ultimo, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to report that the Health Officer has recently called attention in forcible terms to the great want of drainage to the houses on each side of Lalwady, Parel Road. He describes the condition of the chawls as "fearfully dangerous from want of drainage," sewage lying about everywhere and overflowing into the tank of the Dinshaw Petit Mill. I quite concur in the Health Officer's views. In order to do what is wanted a 9" pipe sewer connecting to the sewer in Parel Road must be laid in the road referred to by the Health Officer. The cost of this work, for which I enclose plan and estimates amounting to Rs. 2,579, can be met out of the savings on the work of laying pipe sewers in Parel village, and I request sanction of the Standing Committee and Corporation to it.—I have, &c.,

H. A. ACWORTH, Commissioner.

Resolved: "That, as applied for by the Commissioner, in
No. 4268. his letter No. 8931, dated 29th ultimo, the Corporation be recommended to sanction the payment of Rs. 2,579, to meet the cost of laying a 9" pipe sewer at Lal Baug, Parel Road. The cost to be met out of savings on the work of laying pipe sewers in Parel village."

Resolved: "That the following be *recorded* :—Letter
No. 4269. No. 8943, dated 29th ultimo, from the Commissioner, reporting that he has sold the right of tapping 29 cocoanut trees in the compound of D Ward office at Gamdevi, and gathering fruits therefrom, for a period of one year, from 1st August 1893, to one Rama Vishram Pawaskar for Rs. 45."*

Resolved: "That the following be *recorded* :—Letter
No 4270. No. 8957, dated 29th ultimo, from the Commissioner, reporting that he has sold the right of cutting grass and removing cut grass from the ground adjoining the Victoria Gardens and the garden on the Flats up to 31st March 1894, to one Narayen Vithoo for Rs. 62."†

* Last year the sale realised Rs. 45 for 30 trees.
† Last year the sale realised Rs. 185.

Considered letter No. 8607, dated 26th ultimo, from the Commissioner, to the Secretary, as under :—

SIR,—With the view of introducing an uniform system of keeping stores accounts in the different departments of the Municipality, I have drawn up the accompanying rules to which I request the approval of the Standing Committee under section 123 of the Act.—I have, &c.,

H. A. ACWORTH, Commissioner.

General Rules regarding Stores of all Municipal Departments.

The Stores of the Municipality shall be divided into two classes :—

(1.) Tools and working plant.
(2.) Reserve stock in hand.

1. "Tools and plants" to comprise—
   1. Workmen's tools.
   2. Plant and machinery.
   3. Mathematical and surveying instruments.
   4. Furniture.
   5. Camp equipage.
   6. Live stock.
   7. Meters issued on hire.
   8. Books of reference.

2. "Reserve stock" in hand to comprise—
   1. Small stores.
   2. Building materials.
   3. Timber.
   4. Metals.
   5. Fuel.
   6. Painter's stores.
   7. House fittings.
   8. Meters for measurement of water kept for sale.

3. All expenditure for items classed as Tools and Plant (except for the Workshops, where the cost of new plant and machinery and repairs to machinery, &c., are debited to the 35 per cent. allowances for the supervision, &c., charges), whether for their original supply or repair, should be charged to the different heads of service in the Budget; for instance, charges on account of repairs to machinery in the Love Grove Pumping Station would be charged to the head of repairs to machinery (item 3 of detailed statement No. 8 of the Budget II, Drainage, B, maintenance of Love Grove Pumping Station). Any new articles purchased for these pumps, &c., would be charged to the same head under "Contingencies and Stores."

4. Articles of tools and plants should only be purchased, manufactured or repaired up to the limit of expenditure provided in the Budget and subject to the contract provisions of the Act, and to the proviso that the Commissioner's previous sanction should be obtained before dead stock articles are purchased from the Contingent grants. Any excess over the estimated expenditure should be

covered by necessary further grants, subject, also, to the contract provisions of the Municipal Act.

5. Each department will retain for its own use an inventory, showing in a separate column prime cost and present value of tools and plant. A copy of this inventory should be submitted by each head of department to the Chief Accountant annually on the 15th April, which shall be filed in his office and not printed with the annual accounts.

6. The different branches of the Executive Engineer's Department should confer with each other as to the possibility of transferring from one branch to another articles of tools and plant so as to obviate the necessity of new purchases.

7. Materials comprised under the heads of Reserve Stock required immediately for the execution of works sanctioned and budgetted for, and carried out departmentally, or partly departmentally and partly by contract, or for sale to private parties or for use on private works paid for in advance or undertaken within the provisions of the Municipal Act, should be procured by the heads of departments from the annual supply contractors or manufactured in the Municipal Workshops as may be necessary without reference to any higher authority; but when such reserve stock is not likely to be used upon works before the end of an official year, or when it has to be obtained from other than the annual supply contractors, the provision of the contract and budget grant sections of the Municipal Act should be previously complied with.

8. Articles of reserve stock should not be charged to current budget grants except when issued for maintenance of works within the respective budget limits.

9. Ordinarily materials actually required for works in progress only should be obtained and charged direct to the work concerned, and no reserve of stock should be kept when that course can be avoided. But when it is considered necessary to keep a reserve stock in hand, it should be done in the manner suggested by the latter part of Rule 7.

10. In issuing stock materials to works, such a rate must be charged, except for those articles of which the rates have been fixed by the Standing Committee, as will provide for losses from depreciation, losses on manufacture or wastage, and no charge to "profit and loss" will be admitted on such account. For articles sold to private individuals, &c., 15 per cent. should be put on the value in addition to the above charges.

11. Heads of deparments should have stock taken of all materials brought in their Returns of Reserve Stock at least once a year in March. The present value should be scrutinized; and if a readjustment thereof be considered necessary on account of length of time or for any other reason, the necessary increase or decrease in the value of the articles should be made after careful examination and after obtaining the requisite sanction.

12. The number of articles lost, stolen or used up should be written off the list with the sanction of the Municipal Commissioner.

13. When at the end of the year the value of a reserve stock article is adjusted, that value should be shown in the stock returns and will remain undisturbed until the next period of adjustment, except when for special reasons, a readjustment becomes necessary in the interval.

14. Such of the materials received from the buildings dismantled or undergoing repairs, or from old drains, water mains renewed or repaired, as may be required for use, should be retained and brought on a return to be called "Return of Surplus Stores," under the Executive Engineer's instructions in writing *without a valuation*. All materials of dismantled or repaired buildings, &c., which may not be required or are not likely to be required for use should be sold by public auction, subject to the provision of the Municipal Act, and the sale proceeds credited to General Revenue.

15. In November of each year a list of such stores and articles of "tools and working plant" of any kind as may have become unserviceable should be submitted by the head of the department to the Commissioner, as it is desirable to avoid keeping worthless materials in stock.

All losses incurred should be written off as laid down in para. 12 while submitting such lists, all necessary explanations should be given and the period during which the articles have been in store or in use and the cause of deterioration should be stated.

16. The reserve stock should be kept as low as possible, and all articles which are not likely to be required for use should be reported by each head of department to the Commissioner and his orders as to their disposal solicited.

Loss sustained by the disposal of the articles so disposed of should, with the Commissioner's sanction, be debited to the works for which they may have been obtained.

17. In cases of robbery, loss or destruction, by fire or otherwise, of stores, a report should be made at once to the Commissioner for being dealt with by him according to the circumstances of each case.

18. Perishable articles such as waste paper baskets, cloth dusters, brushes for cleaning desks, floors and other articles likely to last for one or two years should not be brought on the lists of tools and plants or stock.

19. If any articles issued from stock remain on hand after the completion of a work, they may, with the Commissioner's sanction, be taken back on stock at such valuation as the head of the department may fix with the Commissioner's approval, useless article or articles not likely to be required on works should not be brought back on stock.

Rules for general guidance in connection with the Municipal Workshops and Stores Office.

1. The Municipal Workshops and Stores are kept entirely distinct from one another, as already separated by a fence running behind the Workshops at right angles to the main road.

2. The Stores and Store-yard will be under the care of the Inspector of Stores, who will correspond with and be generally responsible to the Chief Accountant. The Inspector of Stores will exercise no authority or interference in the Workshops which, as at present, will be under the Superintendent.

3. The Superintendent of Workshops will indent on the Inspector of Stores for all stores and articles which he may require, whether such stores or articles happen to be in stock or not, and the Inspector of Stores will meet such indents out of his stores if the article required be in stock and by purchase from the Municipal contractors if the article required be not in stock. Under no circumstances will the Superintendent purchase articles from the Municipal contractors or from outside tradesmen; articles obtained by him otherwise than upon indent on the Inspector of Stores as above will not be passed in the accounts.

4. Indents for the Superintendent must be countersigned by the Executive Engineer or the Assistant Engineer unless the articles are of a petty nature, such as screws, nails, &c., or unless the work in hand is of so urgent a nature that the indent cannot be delayed for the countersignature of the Engineer, without detriment to the public service. A daily return of indents will be furnished by the Inspector of Stores to the Chief Accountant.

5. All surplus materials and articles not required other than ordinary wastage will be returned by the Superintendent into Stores, and a corresponding receipt will be given by the Inspector of Stores, who will also keep a counterfoil of the receipt. The Executive Engineer will be responsible for visiting the Workshops periodically and for seeing that surplus material is not unduly returned in the Workshops, and that wastage is properly disposed of.

6. No stores or articles of any kind, manufactured or unmanufactured, are to leave the Workshop Yard or Stores without a pass signed by the Superintendent of Workshops and the Inspector of Stores. The Inspector of Stores will keep a daily record of all stores or articles for which passes are issued, but he will not question the authority of the Superintendent to deliver from the Workshops any article required to comply with the indent of a Municipal officer qualified to make indents or for Municipal works. Provided that in the case of articles despatched direct from Stores and not from the Workshops, the signature of the Superintendent shall not be necessary if the pass has been signed by the Chief Accountant. Counterparts of all passes issued under this rule will be filed by the Gatekeeper, who will be responsible for seeing that no stores or articles are allowed to leave the yard unless covered by a pass.

7. The Inspector of Stores will, as far as possible, meet all indents out of stock already in Store. New materials and articles, as required to comply with the indents, must be obtained from the authorised contractors, and must not be received into Store unless certified by the Health Officer, Executive Engineer, Drainage and Water Engineers, or Superintendent of Workshops, as the case may be, to be of approved quality.

8. Stock shall be taken annually, or, as otherwise directed from time to time by the Commissioner, and subject to the same authority surplus stock and unserviceable articles are to be sold by public auction. The book value of all articles now in stock shall remain undisturbed until revised as laid down in Rule 13 of the General Rules regarding Stores of all Municipal Departments.

Rules for the Water Works and Drainage Stores.

The Stores at Chinchpoogly and near the Bellasis Road Bridge shall be in the immediate charge of the Stores clerks at the respective places, who in all matters of accounts and the proper custody of the Stores will be under the Water and Drainage Engineers respectively, and will also be subject to the supervision of the Inspector of Stores.

2. The Inspector of Stores shall visit each of the above Stores daily and shall see that the books and accounts are properly kept, duly posted and not allowed to run into arrears. He shall also annually take stock, besides periodically checking a certain percentage of the articles on hand with the book and stock list balances.

3. All stores and articles required for Drainage and Water Works purposes shall be obtained as hitherto on indents on the respective Store clerks made out by the Inspectors of Drainage and Water Works respectively, and countersigned by the Water Engineer or Drainage Engineer, as the case may require.

4. The Store clerks will meet such indents out of their stores if the articles required be in stock or by purchase from the Municipal contractors through the Water Engineer or Drainage Engineer, if the articles be not in stock. The Store clerks shall keep in stock at the respective stores such articles as are generally used in quantities sufficient to last under ordinary requirements for 3 or 4 months.

5. Under no circumstances will the Store clerks purchase or obtain any article direct from the Municipal contractors or from outside tradesmen.

Articles obtained by the Store clerks otherwise than upon indents on their respective stores duly made or countersigned by the Water Engineer or the Drainage Engineer, shall not be passed into the accounts.

6. The Stores clerks shall be responsible for seeing that none but the articles provided for under the contracts are received from the contractors and no such article shall be passed into the accounts unless certified by the Executive Engineer, Drainage or Water Engineer, the Assistant Engineer or the Superintendent, Water Works maintenance, as the case may be, to be of approved quality. Monthly returns of all stores issued during the previous month shall be furnished to the Inspector of Stores by the Store clerks at the respective depôts on or before the 15th of every month.

Resolved: "That the consideration of Rules forwarded by the Commissioner, with his letter No. 8607, dated 26th ultimo, be postponed till next meeting, and that in the meantime the same be printed on the minutes of this day's meeting."

No. 4271.

Resolved: "That the following be *recorded* :—Memorandum No. 9221, dated this day, from the Commissioner, reporting the sale of 4 per cent. Government Paper for Rs. 1,46,000, belonging to the 44 lakhs sanitary works loan deposit account, on 26th ultimo, at $107\frac{3}{16}$. Stating that this sale, plus those already reported, aggregate Rs. 11,00,100, which is in excess by Rs. 100 of the limit of Rs. 11 lakhs fixed by the Standing Committee.

No. 4272.

"That, as applied for by the Commissioner in his memorandum No. 9221, dated this day, sanction be given to further sale of 4 per cent. Government Securities to the extent of 9 lakhs, whenever required, for current expenses.

"That each sale of the said securities be reported to the Committee within seven days."

Considered the following :—

Statement of Houses or portions of Houses which fell during the month of June 1893.

No.	Ward.	Street No.	Locality.	Names of Owners.	Description of Building.	Age of Building or date of erection (if known).	Date of fall.	Cause of fall.	Part fallen.	Casualties. Persons injured.	Casualties. Persons killed.	Estimated loss.	Whether or not action taken by the Municipality.	Whether or not warning given to the parties.	Remarks.
							1893.					Rs.			
1	C	228 232	Kumbharwada.	Rajia Agia Kumbar.	House ...	60 years.	20th June.	Effect of weather and rain.	North and west walls.	Nil.	Nil.	50	Notice	given.	
2	"	...	PathanStreet	Daya Bhana ...	Compound...	70 do.	22nd "	Do. ...	Portion of east wall.	"	"	10	"	"	
3	"	21	Nizampura...	Manockji Morwanji..	House ...	100 do.	23rd "	Do. ...	Portion of west wall.	"	"	100	"	"	
4	"	5	Popatwady...	Babaji Sadashew ...	Do. ...	100 do.	" "	Do. ...	Portion of north wall.	"	"	100	"	"	
5	"	14	Antobawady	Sadanand Chimnaji.	Do. ...	30 do.	" "	Do. ...	Portion of south and west walls.	"	"	100	"	"	
6	D	...	Charni Road	Alliance Mill ...	Spinning and Weaving Mill.	25 do.	20th "	Heavy rain ...	Gallery at the south side of the Mill.	"	"	200	Nil.	Nil.	
7	"	53	Walkeshwar Road.	Dayal Lalchand ...	Dhurrumsalla.	50 do.	" "	Do. ...	Front portion ...	"	"	500	"	"	
8	"	...	GirgamRoad	Ganesh Ramjee ...	Stable ...	20 do.	" "	Do. ...	South portion ...	"	"	400	"	"	
9	E	...	Junction of Mount Road and Tank Road	E. D. Sassoon ...	Mill Compound.	1879.	18th "	Do. ...	Portion of compound wall.	"	"	100	"	"	
10	G	...	Mahim Bazar Road.	Bai Pirozbai, widow of Dhunjibhai Mama.	Stable ...	7 years.	" "	Posts not buried in masonry and not trussed; no pucka wall.	The roof, some posts and plank walls.	"	"	300	"	"	

No. 5981 OF 1893-94.

Forwarded to the Municipal Commissioner.

M. C. MURZBAN,
Executive Engineer, Municipality.

28*th July* 1893.

No. 8986 OF 31ST JULY 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH,
Commissioner.

Resolved: "That memorandum No. 8986, dated 31st ultimo, from the Commissioner, and return submitted therewith, be *recorded*."

No. 4273.

Considered again letter No. 8365, dated 25th ultimo, from the Commissioner, reporting on petition addressed to the Corporation, from H. H. Agakhan, Sir Jamsetjee Jejeebhoy and others, on the subject of widening Matharpakadi Road.

Proposed by Bhalchandra K. Bhatawadekar, Esq., seconded by Javerilal U. Yajnik, Esq.—

"That a Sub-Committee, consisting of Messrs. Carroll, Shroff, Roughton, and Dr. Bhalchandra, be appointed to report on the question of the improvement of Matharpakadi Road."

No. 4274.

Carried.

Resolved : That the following be *recorded* :—Memorandum No. 8754, dated 28th ultimo, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the transfer (*a*) of Rs. 9,875-10-0 from the 44 Lakhs Sanitary Works Loan deposit account No. 1 to the General Fund pass book on 22nd idem ; (*b*) Rs. 4,694-2-0 from the 12 Lakhs Drainage and Water Works Loan deposit account to ditto on ditto ; (*c*) Rs. 8,614-3-0 from the Municipal Building Fund deposit account to ditto on ditto ; (*d*) Rs. 4,454-6-0 from the 4½ Lakhs Fire Brigade Quarters and Station Loan deposit account to ditto on ditto ; and (*e*) Rs. 17,203-6-0 from the surplus cash deposit account to ditto on ditto. Also reporting, with reference to the Committee's resolution No. 5620, dated 9th January 1889, the transfer on the 22nd idem (*e*) from the Surplus Cash deposit account to

No. 4275.

the Worn-out Mains Renewal Fund and Municipal Buildings Fire Insurance Funds deposit account 4 per cent. Municipal debentures for Rs. 2,500 and Rs. 500 respectively.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 30th July 1893.

BOMBAY, 9*th August* 1893.

AT the meeting of the Standing Committee held this day there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 2nd instant, were signed.

No. 4192. *Resolved* : "That the following be *recorded* :—Letter to the Chairman, No. 4446, dated 7th instant, from Messrs. J. Leask and H. W. Barrow, reporting that that day, before office hours, they respectively delivered over and received charge of the office of the Municipal Secretary."

Nos. 4493-95. The seal of the Corporation was affixed (1) to deed of contract with Messrs. Spencer & Co., for works in pipe sewers, manholes, automatic flushing tanks, and metal vent-shafts on and near Currey Road; (2) to deed of agreement with Mr. Abdoola Allibhai Ibrahim, for the right of selling to the public, refreshments at the refreshment room in the Victoria Gardens for a period of one year, from 1st instant; and (3) to deed of contract with Messrs. Hormusjee Jamasjee Mistri and Perosha Dhunjibhai Patel, for the construction of bullock stable, store-room and offices at Dadar.

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* The Chief Accountant reports to the Commissioner that the balances remaining after effecting the above transfers are :—

(*a*)	In 4 per cent.	Government Paper for..	Rs.	6,20,000	Rs.	6,06,808	8 3
(*b*)	„ 4 „	„ ...	„	2,35,000	„	2,34,118	12 0
(*c*)	„ 5 „	Municipal Debentures ...	„	3,45,000	„	3,45,000	0 0
(*d*)	„ 4 „	„	„	2,23,000	„	2,23,000	0 0
(*e*)	„ 4 „	Government Paper ...	„	4,33,000	„	4,31,700	5 0
	„ 4 „	Municipal Debentures ...	„	24,000	„	21,000	0 0
	„ 5 „	„ ...	„	22,91,000	„	22,91,000	0 0

† *See* Appendix **B.**

The seal was also affixed (1) to 352 debentures of the 42 Lakhs 4 per cent. Loan, Nos. 31 to 50, 3803 to 3901, 6002 to 6101 and 7940 to 8072, of Rs. 500 each ; (2) to 416 ditto ditto, Nos. 2063/2064 to 2493/2494 and 5602/3 to 6000/1, of Rs. 1,000 each ; (3) to 443 ditto, Nos. 2495/6 to 2925/26, 7140/1 to 7178/9, 7428/29 to 7570/1, 8073/4 to 8171/2, 1052/3 to 1160/1, 1252/3 to 1270/1, 1282/3 to 1320/1, of Rs 1,000 each ; (4) to 16 ditto ditto, Nos. 972/81 to 1042/51, 1182/91 to 1222/31 and 1362/71 to 1382/91, of Rs. 5,000 each ; (5) to 5 ditto ditto, 1232/35 to 1248/51, of Rs. 2,000 each ; (6) to 32 ditto ditto, Nos. 1322/53, of Rs. 500 each.

No. 4496.

Resolved : " That, as applied for by the Commissioner, in his memoranda Nos. 9289 and 9290, dated 3rd instant, and No. 9511, dated 7th idem, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Govind Vanjari	...Building at No. 37, Kamathipura 3rd Street.
,, Venkuji Narsuji	... Do. at Ripon Road, Agripada.
,, Jamsedji Hormusjee Pagdiwalla	... Do. at No. 18, 2nd Pinjrapol Street."

Read letter No. 9317, dated 3rd instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to state that when Mr. Mahomed Ismail Makba rebuilt without permission the whole of the front wall of his ground floor house marked A on the accompanying plan, he was asked to remove the unauthorised work, and further informed that the whole of the land was required for street improvement. He was also offered compensation at the rate of Rs. 30 the square yard for the land *plus* Rs. 1,900 for the old building in full satisfaction of all his claims and was requested to forward his title deeds for investigation. But when they were produced it was found that the land was leased to him by the Collector and that he was not the absolute owner. A reference was thereupon made to the Collector on the subject by the Executive Engineer when he was informed by the former that the capitalized value of the rental due to Government, calculated at the rate accepted by Mr. Makba, would amount to Rs. 3,748-2-6. Mr. Makba was informed of this claim when he asked for time to enable him to settle the matter with the Collector, but instead of settling the claim of the Collector, he now demands Rs. 75 per square yard, and it is obvious to me after a long correspondence that no settlement between Mr. Makba and the Collector is to be expected.

This set-back is an important one, and I therefore request the approval of the Standing Committee, under section 351 (2) of the Act, to my removing the unauthorised work executed within the regular line. The question whether the value of the land is to be paid to the Collector or to Mr. Makba or whether each to be paid part, and what part can be settled afterwards, but a three years' futile correspondence shows that if we defer the set-back till we can agree with Mr. Makba, we shall defer it for ever.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 4497. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 9317, dated 3rd instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the unauthorised work executed by Mr. Mahomed Ismail Makba at his premises at Carnac Road, and as shown on the plan marked B, dated this day, and filed in supplement to minute books."

No. 4498. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 9705, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 4499. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 9416, dated 4th instant, and under the provisions of section 91 of the Municipal Act, the Standing Committee approve of application being made by him to Government to acquire, under the terms of the Land Acquisition Act, 370 square yards or thereabout of ground at Gibbs Road, belonging to the Parsi Punchayet, the same being required for the construction of a catch-water drain and the laying of a 24" water-main by the side of that road."

No. 4500. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 9126, dated 1st instant, and under the provisions of section 381 of the Municipal Act, the Standing Committee approve of written notices being served on Messrs. Sayaji Naguji and Jaguji Hanmantrao, requiring them to fill in with sweet earth a water-hole belonging to them and lying between the chawls of Ramji Mahadeo and the G. I. P. Railway line and the G. I. P. Railway Company's Stores bungalow at DeLisle Road, as in the opinion of the Health Officer the hole causes a nuisance."

No. 4501. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 9310, dated 3rd instant, and under the terms of section 79 (2) of the Muni-

cipal Act, sanction be given to the modification of the schedule of appointments for supervising the construction of the Health Department's Stables for F and G wards so as to allow of the following alterations therein :—"

Establishment for the Health Department Stables, F and G Wards.

As per Budget for 1893-94.			As required.		
No.	Designation.	Monthly salary. Rs.	No.	Designation.	Monthly salary. Rs.
1	Inspector	100	1	Inspector	100
1	Surveyor	65	1	Draftsman	35
1	Draftsman	45	1	Mistri	40
1	Tracer	20	1	Clerk	40
1	Clerk	50	2	Laskars at Rs. 10 each	20
1	Messenger peon	8			235
		298		For 14 months from 1st August 1893	14
	For 12 months	12		Total Rs. ..	3,290
	Total Rs. ..	3,576			
	Allowance to Health Dept. Audit Clerk in the Chief Accountant's Office at Rs. 20 per month × 12 months.	240		Allowance to Health Dept. Audit Clerk at Rs. 20 per month × 14 months	280
		3,816			3,570
				Savings Rs. ..	246
					3,816

Resolved : "That, as applied for by the Commissioner, in his letter No. 9125, dated 1st instant, and under the terms of section 79 (2) of the Municipal Act, sanction be given to the modification of the schedule of appointments in the Registration of Births and Deaths branch so as to allow of the following alteration being made therein, *viz.*, the pay of the Registration Clerk employed at Sewri Cemetery being increased by Rs. 10 per mensem, from 28th April 1893.

No. 4502.

"That sanction be also given to the payment of Rs. 101, to meet the extra cost as above, from 28th April 1893, until the end of February 1894. The charge to be met out of savings in the current year's Budget grant, section II, Registrars, Registration of Births and Deaths."

Considered letter No. 9314, dated 3rd instant, from the Commissioner, to the Secretary, as under :—

SIR,—Under Section 172 (2) of the Municipal Act, the Halalkhor Tax in respect of Government and Port Trust properties has to be fixed at a special rate approved by the Standing Committee. The Standing Committee, as per their resolution No. 6098 of 2nd September 1891, have sanctioned Rs. 18-4-0 as the charge for a special halalkhor. As this special charge is based on the cost of the

service rendered by the Municipality, the amount thus calculated in respect of chowkeys and other small buildings sometimes falls below the minimum tax on value prescribed by Section 140 (*b*) of the Act. As I think it anomalous that the special charge in any case should be less than the minimum fixed by law, I have the honor to request the sanction of the Standing Committee to the minimum special halalkhor charge being fixed at annas four per month.—I have, &c., H. A. ACWORTH, Commissioner.

No. 4503. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 9314, dated 3rd instant, and with reference to the Resolution of the Standing Committee No. 6098, dated 2nd September 1891, the Committee approve, under the terms of Section 172 of the Municipal Act, of the minimum charge for special halalkhor service being fixed at annas four a month."

No. 4504. *Resolved* : " That the Progress Report of new works in course of construction up to the end of June 1893 be laid on the table and brought on for consideration next week."

No. 4505. *Resolved* : " That the following be *recorded* :—Letter No. 9345, dated 3rd instant, from the Commissioner, stating that flower pots and wooden stands have been placed for some years past on the Municipal ground in Rope Walk Lane, Fort, by one Hadji Allee Baybani. Reporting that, in order to prevent the owner from acquiring any claim or right over the Municipal ground, he (the Commissioner) has sanctioned the charging of a nominal rent of annas four for the next year for the use of the ground."

Read the following :—

No. D. 3733 OF 1893-94.

BOMBAY, 28*th July* 1893.

TO THE COMMISSIONER,
Through the Executive Engineer.

SIR,—With reference to your memorandum regarding the 200 tons of Bengal coal tried at Love Grove in the months of February and March, I have the honour to report that tests were made at Love Grove by Mr. Carr and Mr. Horbury, but the tests were not successful owing to the fact that it was not possible to keep all the pumps going during the whole of the day, as they were constantly being stopped for packing; but test at Love Grove did show that the Bengal coal was of a very uncertain character, and it left a very large percentage of residue of ash in the percentage of 3 to 1 as against West Hartley. The Love Grove test being unsuccessful,

the 20-ton steam-roller was put at the disposal of Mr. Hewett at the end of March, and he made some careful tests, the result of which showed that the water evaporated per lb. of coal in the case of the West Hartley amounted to 6·23 lbs., while in the case of the Bengal it was 5·27 lbs., the result being distinctly in favour of the West Hartley coal. Another test has been made with a caloric meter, which shows the different evaporative efficiencies of West Hartley, Bengal and Cardiff, samples being taken for this purpose from the coal in stock at the Love Grove Pumping Station, with the following results :—

I.—WEST HARTLEY COAL.

No. of test.	Pounds of water evaporated from 1 at 212° by one pound of coal.
1.	13·75
2.	13·20
3.	13·20
Average	13·38

II.—BENGAL COAL.

No. of test.	Pounds of water evaporated from 1 at 212° by one pound of coal.
1.	12·925
2.	9·350
3.	11·000
Average	11·09

III.—CARDIFF COAL.

No. of test.	Pounds of water evaporated from 1 at 212° by one pound of coal.
1.	12·1
2.	12·2
3.	13·2
Average	12·5

These results show that the West Hartley was the best coal then in stock ; Cardiff being next, and Bengal being considerably behind either of them, added to which Bengal coal is dirty and necessitates constant cleaning of fires. At that time we gave Rs. 16-4-0 for Bengal coal delivered at Love Grove. For Nixon's navigation coal we have just given Rs. 16-8-0, and if Bengal coal is not obtainable at a largely cheaper rate than English, it would not be desirable to get any more ; but I was informed by the Locomotive Superintendent of the G. I. P. Railway some time ago that they paid something like Rs. 3-8 per ton for their Bengal coal at the pit's mouth ; that would give a rate approximately delivered in Bombay at Rs. 13-8-0 per ton, and that at that rate it might be advantageous to the Municipality to try it again.—I have, &c., O. C. JAMES, A.M.I.C.E., Drainage Engineer.

No. 6158 OF 1893-94.

BOMBAY, *2nd August* 1893.

TO THE COMMISSIONER.

Forwarded to the Municipal Commissioner with reference to his No. 27770, dated 22nd March 1893, and two subsequent reminders.

The chief drawback of Bengal coal is its uncertain quality. From the tests of the evaporation efficiency of different kinds of coal, it will be observed that whilst the difference between the maximum and minimum quantities of water evaporated by one pound of Bengal coal is as much as 3·575, it is only 0·55 in the case of West Hartley coal and 1·10 lbs. in the case of Cardiff coal. The efficiency of the best quality of Bengal coal is very nearly equal to the best sample of Cardiff coal, and falls but little short of that of the best sample of West Hartley coal. Taking, however, the average result derived from each of these kinds of coal, the efficiencies and, therefore, the commercial values of West Hartley, Cardiff and Bengal coals must be taken in the ratio of 13·38, 12·50, and 11·09. This shows that if West Hartley coal cost Rs. 18-8-0 per ton, the values of Cardiff and Bengal coals should not exceed Rs. 17·29 and Rs. 15·33 per ton, respectively. If, as stated by the Drainage Engineer, Bengal coal can be had at Rs. 13-8-0, it would be worth while to give it a more extensive trial than what it has already received.—M. C. MURZBAN, Executive Engineer.

No. 9349 OF *3rd August* 1893.

Copies forwarded to the Municipal Secretary for information with reference to the resolution of the Standing Committee, No. 13452, dated 15th March last.—H. A. ACWORTH, Commissioner.

No 4506. *Resolved* : "That the following be *recorded*, with the expression of the Committee's opinion that it is desirable to continue the experiments with Bengal coal :—Memorandum No. 9349, dated 3rd instant, from the Commissioner, reporting, with reference tc the Resolution of the Committee, No. 13452, dated 15th March last."

No. 4507. *Resolved* : "That the following be printed and brought on for consideration next week :—Memorandum No. 9205, dated 2nd instant, from the Commissioner, forwarding report of the working of the Gokuldas Tejpal Hospital for 1892."

Read the following :—

No. 6050 of 1893-94.

BOMBAY, 31*st July* 1893.

TO THE COMMISSIONER.

SIR,—The complaint is in regard to (1) Kandawadi Lane, (2) Cow Lane, (3) Sadashiv Cross Street, and (4) Borebhat Lane. The repairs to Kandawadi Lane were commenced on June 16 from the Girgam Back Road end and extended over one-third of a mile in length. It could not, of course, be metalled at once, but the remaining work is in hand. Before the fulll metalling was taken in hand, large depressions in the road were filled up to avoid inconvenience to the public. This has presumably led the complainant to suppose that only a portion of the road was to be metalled and that the rest was being simply patched. The work has been and is being done in a satisfactory and workmanlike manner. The portion of the Cow Lane which is wide and subjected to carriage traffic was repaired in July 1891, and is now in fair order. The narrow portion at the Mugbhat end requires repairs which will be executed in due course. Sadashiv Street is in good order, and no water accumulates in it. Borebhat Street is private, but is in better order than many other private streets. The Municipality can take no action in regard to this street. The complainant's statement that Cow Lane and Borebhat Street are turned into privies is correct, and the Health Department take, I am informed, action against the offenders when they are detected.—M. C. MURZBAN, Executive Engineer.

No. 9268 of 2ND AUGUST 1893.

Copy forwarded to the Municipal Secretary with reference to Standing Committee Resolution No. 3509 of 12th July 1893.—H. A. ACWORTH, Commissioner.

No. 4508.

Resolved : "That the Commissioner's memorandum No. 9268, dated 2nd instant, and accompanying report from the Executive Engineer, be forwarded to the Corporation, with reference to petition from Mr. Anant Baburao Paranjape."

Considered again letter from the Commissioner, No. 8607, dated 26th ultimo.

Proposed by A. G. Viegas, Esq.—

"That the draft rules for the keeping of the accounts of Municipal stores be referred to a Sub-Committee, consisting of Mr. Roughton, the Hon'ble Mr. Javerilal U. Yajnik and Mr. Bhalchandra K. Bhatawadekar."

Not seconded.

Proposed by E. B. Carroll, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

No. 4509. "That the consideration of the draft rules submitted with the Commissioner's letter No. 8602, dated 26th ultimo, be postponed until the next meeting of the Committee."

Carried.

No. 4510. *Resolved*: "That the following be *recorded*:—Memorandum No. 9069, dated 1st instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the transfer (*a*) of Rs. 2,500, from the worn-out mains renewal fund deposit account, to the General Fund pass book, on 25th ultimo; (*b*) Rs. 500, from the Municipal Building Fire Insurance Fund, to ditto on ditto."*

No. 4511. *Resolved*: "That the following be forwarded to the Commissioner for disposal and that the applicant be informed accordingly:—Letter, dated 5th instant, from Javerbai and Maneckbai, widows of Narayen Bhimjee, complaining of the notices served by the Engineer's Department, requiring the removal of the structure built at No. 511, Dongri Street."

Proposed by A. G. Viegas Esq., seconded by Grattan Geary, Esq.—

No. 4512. "That, with reference to the resolution of the Corporation, No. 4235, dated 31st ultimo, and having regard to the desirability of carrying out the improvements in question at as early a date as practicable, the Standing Committee recommend the Corporation to sanction the expenditure of Rs. 16,000, from surplus cash balance, for the cost of providing sheep and goat market at DeLisle Road."

Carried.

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* The Chief Accountant reports to the Commissioner that the balances remaining after effecting the above transfers are:—

(*a*)	In 5 per cent. Municipal Debentures for	Rs.	97,500 =	Rs. 97,500	0 0
	„ 4 „ „ „	„	2,500 =	„ 2,500	0 0
	Cash	„		55	2 4
(*b*)	In 5 per cent. Municipal Debentures for	Rs.	12,500 =	„ 12,500	0 0
	„ 4 „ „ „	„	500 =	„ 500	0 0
	Cash	„		81	14 5

The following return was read and *recorded* :—

No. 4513. Return of fires at Chinch Bunder Road, Kolsa Street, and Chinch Bunder Road, forwarded with the Commissioner's memorandum No. 9116, dated 1st August 1893.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 6th August 1893.

No. 4514. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 9682, dated this day, and under the terms of Section 300 (1) (*b*) of the Municipal Act, the Standing Committee approve of Mr. Oca Toolaji being required to set forward his premises at Currey Road to the regular line of the street thereat as shown on the plan accompanying the said memorandum, marked A, dated this day, and filed in supplement to minute books."

Read letter No. 9681, dated 9th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to state that land is required to be taken up from three properties in connection with the construction of the overbridge at Falkland Road, and the Executive Engineer considers the amount of compensation, mentioned below, fair to offer to the owners of these properties :—

Jivraj Balu Mill Co.

233·42 square yards, at Rs. 8 per square yard ...	Rs.	1,867·36
Value of compound wall and conduit	„	1,632·64
	Rs.	3,500

Manockji Petit Mill Co.

5·69 square yards, at Rs. 8 per square yard ...	Rs.	45·52
Cost of rebuilding front portion of the chawl and side-wall	„	244
Capitalized value for loss of rent	„	400
	Rs.	689·52
or, say, Rs. 690		

Mr. Dorabji Kavasji Davar.

125 square yards, at Rs. 8 per square yard ...	Rs.	1,000
Value of the chawl	„	1,531
Cost of rebuilding the compound wall and cesspool	„	435
Removing and refixing service pipes	„	10
Value of trees	„	82
Compensation for loss of compound	„	942
	Rs.	4,000

* *See* Appendix C. † *See* Appendix B.

The owners were accordingly communicated with, and have now, after considerable correspondence, accepted the Executive Engineer's estimate of compensation, to which I request the approval of the Corporation under Section 90 of the Act.

The total amount, *viz.*, Rs. 8,190, is debitable to the provision of Rs. 22,000 entered in the Loan Works Budget for the current year, page 76 ; but as the expenditure sanctioned by the Corporation to be incurred during the year is Rs. 12,000 (page 77 of the Budget), I request the Standing Committee to recommend the Corporation to sanction, pending the raising of the loan, an advance of Rs. 12,000, from available loan or other funds, to be adjusted hereafter against the loan when raised. The Chief Engineer, B. B. & C. I. Railway Company, has requested me to expedite the acquisition of the land required, and the taking up of the land will now enable him to make final arrangements for calling for tenders and completing all preliminaries necessary for starting the work after the rains.—I have, &c., H. A. ACWORTH, Commissioner.

No. 4515.

Resolved : " That, as applied for by the Commissioner, in his letter No. 9681, dated this day, the Corporation be recommended to sanction, under the terms of Section 90 of the Municipal Act, the purchase of the following pieces of ground at the undermentioned rates, required in connection with the construction of the Falkland Road Overbridge, *viz* :—

From the Jivraj Balu Mill Co.

233·42 square yards, at Rs. 8 per square yard ...	Rs.	1,867·36
Value of compound wall and conduit	„	1,632·64
	Rs.	3,500

From the Manockji Petit Mill Co.

5·69 square yards, at Rs. 8 per square yard ...	Rs.	45·52
Cost of rebuilding front portion of the chawl and side-wall	„	244
Capitalized value for loss of rent...	„	400
	Rs.	689·52
Or, say, ...	„	690

From Mr. Dorabji Kavasji Davar.

125 square yards, at Rs. 8 per square yard ...	Rs.	1,000
Value of the chawl	„	1,531
Cost of rebuilding the compound wall and cesspool	„	435
Removing and refixing service pipes	„	10
Value of trees	„	82
Compensation for loss of compound	„	942
	Rs.	4,000

" That the Corporation be further recommended to sanction an advance of Rs. 12,000, from surplus or other

available funds, to meet the cost of these purchases, such advance to be adjusted against the loan still to be raised as per pages 76-77 of the Budget grants for 1893-94."

Resolved : " That, as applied for by the Commissioner, in his letter No. 9755, dated this day, sanction be given to the purchase of 250 tons of Davison's West Hartley coal at Rs. 15-4-0 per ton and 250 tons of Powell's Duffryn coal at Rs. 16-12-0 per ton, delivered at Love Grove, from Messrs. Killick, Nixon & Co.

No. 4516.

" That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as similar arrangements sanctioned by the Committee's resolutions Nos. 9755, dated 7th January 1891, and 921, 1453, 4271, 9917, 12866 and 4030 of 1892-93 and 1893-94, have proved advantageous to the Municipality."

BOMBAY, 16*th August* 1893.

AT the meeting of the Standing Committee, held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHORFF, Esq.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the Meeting held on the 9th instant, were signed.

The seal of the Corporation was affixed (1) to deed of contract (in duplicate) with Messrs. Richardson & Cruddas, for the supply of cast-iron and galvanized sheet iron vent-shafts and cast-iron covers, &c., for the Colaba sewerage district; (2) to deed of agreement with Messrs. R. D. Babaji & Co., for the supply of hose for the Victoria, Elphinstone Circle and Falkland Road gardens; and (3) to ditto, with Messrs. Heptula Sheik Adam & Co., for lease to them of Municipal land at French Road at the yearly rent of Rs. 112, being at the rate of 4 annas a square yard.

The seal was also affixed (1) to 504 debentures of the 42 Lakhs Municipal Loan, Nos. 56 to 93, 1162 to 1181, 1272 to 1281, 1354 to 1361, 1392 to 1566, 6102 to 6206, 7007 to 7139, and 8173 to 8272, of Rs. 500 each; (2) to 400 ditto ditto Nos. 6207-8 to 7005-6, of Rs. 1,000 each;

(3) to 50 subdivided debentures of the Tansa Water Works Loan, Nos. 1751/52 to 1799/800, and 1801/2 to 1849/50, of Rs. 1,000 each ; (4) to 6 attested duplicate debentures of ditto, Nos. 851/2 to 861/2, of Rs. 1,000 each ; (5) to 1 attested duplicate debenture of the Sanitary Works Loan of 1885, No. 403 NN., of Rs. 500 ; and (6) to 1 attested duplicate debenture of the Bombay Municipal Loan of 1878, No. 1617, of Rs. 500.

No. 4634. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 10054, dated 14th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission:—

Name of owner.	Where.
Mr. Ebrahim Ful ...	...Elphinstone Bunder (Port Trust)."

No. 4635. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 10167, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 4636. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 10008, dated 14th instant, the Corporation be recommended to sanction (1) the pay of the following establishment, up to the end of the current financial year from 1st proximo, for the new Foras Road Market, *viz.* :—

1	Sub-Inspector ...	... Rs. 20	a month.
4	Peons on Rs. 10 each	... „ 40	do.
3	Lascars on Rs. 11 each	... „ 33	do.
		Rs. 93 or	

Rs. 558 for six months ; (2) the expenditure of Rs. 96 for clothing for the peons—total Rs. 654. The cost to be met from surplus cash balance."

No. 4637. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 9956, dated 1st instant, sanction be given to the transfer of Rs. 400, from savings in section 4, lighting markets and slaughter-houses (cost of lighting other markets), to section 9, contingencies, printing, stationery, &c., same department, to meet excess on the latter head."

No. 4638. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 9903, dated 10th instant, sanction be given, under section 517 (1) (*j*) of

the Municipal Act, to a suit being filed in the Court of Small Causes against the Nawab of Beila for the recovery of Rs. 26, amount of wheel-tax bill due by him for the quarter ending 30th September 1891."

No. 4639. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 9897, dated 10th instant, sanction be given, under No. 3 of the Pension Regulations, to Mr. Behramji Bhimjibhai, a Sub-Inspector in the Engineer's Department, being allowed to contribute to the Pension Fund, from the date of his permanent appointment, *viz.*, 6th June 1893."

No. 4640. *Resolved*: "That memorandum No. 10053, dated 14th instant, from the Commissioner, forwarding statement of lapsed grants payable out of current revenue and loan funds for 1892-93, be printed and brought on for consideration next week."

No. 4641. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 9720, dated 9th instant, and under the Pension Regulations, sanction be given to the payment of Rs. 2,350-2-8, as compassionate allowance to Motibai, widow of Mr. Atmaram Motiram, late Ward Superintendent, Assessment Department.

"The amount to be met from the grant for pensions and gratuities, current year's budget."

Considered the following :—

No. 9205 OF 1893-94.

BOMBAY, 2*nd August* 1893.

The accompanying Annual Report of the working of the Goculdas Tejpal Hospital for 1892, is forwarded to the Municipal Secretary for the information of the Standing Committee and Corporation.—H. A. ACWORTH, Commissioner.

ANNUAL REPORT OF THE GOCULDAS TEJPAL NATIVE GENERAL HOSPITAL, BOMBAY, FOR THE YEAR 1892.

1. CONSERVANCY AND WATER SUPPLY.—The "water carriage system" of conservancy in operation at this hospital was kept in perfect working order throughout the year. As water was plentiful during the year, the cleanliness of the trough closets, soil pipes, and drains was insured by proper and frequent flushing. The closets inside the building and the latrines in the compound were inspected by me and frequently by the House Surgeon to see that they were kept clean and disinfected.

The water supply was good and abundant; and certain representations made by me during the year resulted in improvements being effected, whereby the pressure was increased, and the necessity which had hitherto existed of working the pumps to supply water to the tanks on the upper floors was obviated. In this way more convenience to patients was secured and the annual expense of hand labour to work the pumps was saved.

2. HOSPITAL BUILDINGS.—These were kept in good order. The usual minor repairs, painting and lime-washing of walls, &c., were satisfactorily done. The Hospital fittings were kept in good order, and the patients' cots were painted, repaired and kept free from insects. The drainage pipes on the east end of the Hospital were choked during the year; this matter having been brought to the notice of the Public Works Department, the old drainage pipes were removed from the compound and in their place three separate branches were laid to the Municipal drain in Carnac Road according to the most recently approved principles. It is to be hoped that no further choking will now take place.

3. GENERAL HEALTH OF THE TOWN.—

4. ATTENDANCE OF PATIENTS—

(*a*) *In-door patients.*—The total number of admissions during the year was 3,060 as contrasted with 2,953 of last year, being an increase of 107. The total treated in the wards was 3,167 as contrasted with 3,065 of last year, being an increase of 102. Each bed accommodated during the year about 26 patients. The average detention in hospital was about twelve days. The average daily number of in-door patients was 108·2, the average of men being 89·7, of women 12·3, and children 6·2.

(*b*) *Out-door patients.*—The total number of admissions was 14,718 as contrasted with 15,030 of last year, showing a decrease of 312. The total treated was 14,807 as contrasted with 15,132 of last year, showing a decrease of 325. The average daily number of sick out-patients was 88·5, the average of men being 56·9, females 12·7, and children 18·9.

5. COMMON DISEASES AMONGST THE IN-PATIENTS.—

(*a*) *Medical.*—The admissions from the most prevalent diseases were in the following order:—(1) Malarial fevers, 380; of these there were 60 of the remittent type, and 320 of the quotidian variety of intermittent fever. The former were of the usual severe type occurring in broken-down constitutions and often complicated with bronchitis and pneumonia. (2) Rheumatism, 230; of these 4 were of the acute variety, one of which was complicated with endocarditis and the rest were chronic. (3) Respiratory affections, 216; of these the principal ones were 39 cases of acute and 98 of chronic bronchitis, 55 cases of pneumonia, and 15 of asthma. The admissions from respiratory affections seem to be on the increase year by year. (4) Diarrhœa, 151. These were mostly chronic cases where there was no power of absorption or assimilation left

owing to profound pathological changes in the glandular apparatus of the intestines having taken place long before admission. These cases occurred in pilgrims, mendicants and such like people. (5) Tubercle, 106. These were cases of tubercular pulmonary phthisis mostly in its advanced stage, and occurred amongst the same class of people. (6) Dysentery, 99. The acute cases were few and were amenable to treatment, but the chronic cases resembled very much the cases of chronic diarrhœa above mentioned in their severity, and the class of patients in whom they occurred. (7) Diseases of the nervous system, 82 ; of these the principal ones were 28 cases of cerebral lesions (softening and hæmorrhage), 13 of tetanus, 8 of insanity, 7 of epilepsy, 5 of locomotor ataxy, &c. (8) Liver diseases, 61 ; of these the principal ones were 28 cases classed as hepatitis, 14 were of hepatic abscess, 9 of congestion, and 8 of jaundice. The abscess cases were all of the worst type, the abscesses being enormous in size, pointing mostly in the epigastric region, and the liver tissue extensively destroyed. These were all treated surgically.

(*b*) *Surgical.*—As a rule cases of very severe injuries are admitted into this hospital. The hospital is near the two Railway termini ; it is near the Crawford Market and the densely populated districts in its vicinity, near the shipping and near the docks. Hence there is a large number of cases of assaults, carriage accidents, tram accidents, accidents in the docks and the shipping, and mill accidents, brought to it. These cases furnish thus the largest number of admissions to this hospital, making it essentially a surgical hospital, and entailing heavy work on its staff. Accidents from the shipping alone furnished 118 cases.

There were 656 cases of *local injuries ;* of these the principal surgical regions affected were in the following order of frequency : lower extremity 235, upper extremity 194, head and face 111, chest 48, abdomen 25, back 21, pelvis 13, eye 7, and neck 2. The local injuries classed according to their nature were in the following order of frequency :— *Wounds of all kinds,* 256 ; of these one was a wound of the trachea, and one of the abdomen penetrating it, the latter ending fatally. *Fractures of all kinds,* 229 ; of these there were 10 of the base and 7 of the vault of the scull, 5 of the spine, and 3 of the pelvis. 64 of these again were compound and 165 were simple fractures. *Contusions,* 143 ; of these the important ones were 31 of the chest and 22 of the abdomen, two of these latter being complicated with rupture of internal viscera. *Dislocations* 7 ; of these 2 were compound and the rest were simple. The principal ones were 2 of the hip joint and 2 of the shoulder. Of surgical diseases the principal ones were in the following order of frequency of admission :— *Venereal diseases,* 161 ; these included 6 cases of primary syphilis, 66 of secondary syphilis, 26 of gonorrhœa and 63 of those classed as ulcer of genitals, which were cases of chancroids or soft chancre ; all these were of a severe type and hence required admission into the hospital. There were

11 prostitutes treated for venereal affections in the hospital. *Abscesses*, 79. *Ulcer of all kinds*, 54 ; these occurred principally in pilgrims, mendicants and such other half-starved people. *Tumours*, 43 ; of these 26 were non-malignant and 17 malignant. Of the malignant ones 15 were cancers and 2 sarcomata. Of the cancers the principal ones were 6 of the female breast and 4 of the penis. Of the sarcomata one was of the abdominal and the other of the chest wall. *Diseases of the rectum and anus*, 37 ; the principal ones were—external piles 10, internal piles 5, fistula 9, abscesses 5, and fissures 5. *Buboes* 35 ; *skin diseases*, 30. *Burns of various* degrees, 24. *Diseases of the Tunica vaginalis*, 24 ; of these 18 were cases of hydrocele, and 6 of hæmatocele which required radical measures for cure ; some of these had to be laid thoroughly open and drained, their walls being enormously thickened or rendered calcareous. *Calculus in the bladder*, 18. *Diseases of bone*, 17, including 1 case of caries of the spine. *Strangulated hernia*, 15 ; not one of these required herniotomy ; all were reduced by taxis or by application of the ice bag, or the hot bath. *Orchitis*, 13. *Stricture of the Urethra*, 9 ; *Ear diseases*, 7 ; and *Eye diseases*, 6.

(*c*) *Toxicological*, 147.—Of these there were 112 admissions from alcoholic poisoning, 16 from opium, 6 from dhatura, 4 from Cannabis Indica, 2 from arsenical, 1 from sulphuric acid, 1 from petroleum and 1 from aniline poisoning. There were 4 poisoned wounds, principally horse-bites.

The admissions were in the following order according to race : Hindus 1,567 ; Mussulmans 935 ; Native Christians 393 ; Parsees 155 ; and other castes 10.

Common diseases treated amongst the Out-Patients.—The principal ones were in the following orders (1) malarious fevers 2,073, principally intermittent fever ; (2) skin diseases 1,484, principally scabies, eczema, urticaria and impetigo ; (3) respiratory affections including tubercular and other diseases of the lungs, &c., 1,282 ; the principal affections were bronchial catarrh and acute and chronic bronchitis ; (4) Rheumatism chiefly chronic 1,004 ; (5) Ulcers of all kinds 746 ; (6) Worms intestinal 704 ; (7) Venereal diseases including syphilis and gonorrhœa and genital ulcers 515 ; (8) Eye diseases 374 ; the principal ones were cases of conjunctivitis and ulcers of the cornea ; (9) ear disease 374, principally inflammation and abscesses of the external meatus, and wax in the ears ; (10) Diarrhœa 304 ; and (11) Dysentery 143.

There were 2,603 cases treated of local injuries, consisting principally of wounds and contusions ; and 74 of general injuries.

Police, Medico-legal and Inquests.—There were 2,018 police cases brought to hospital for treatment and opinion ; these were mostly accidents and assaults. There were 51 inquests held during the year, of which 33 were for fatal injuries, 6 for poisoning, 5 for burns, 3 for traumatic tetanus, 1 for apoplexy, 1 for infantile convulsions, 1 for pyæmia, and 1 for disease of the spine.

6. Observations on Major Surgical Operations.—There were one hundred major operations performed during the year, or ten less than the previous year. Counting the 10 cases remaining from the previous year the total was 110. Seventeen deaths occurred amongst these, showing a mortality of 15·5 per cent. Of the 17 fatal cases *four* occurred in cases of hepatic abscess opened by the knife. These were all large abscesses and the liver tissue was extensively destroyed and they had diarrhœa, the deaths being due to exhaustion. 2 *deaths* occurred in cases of lithotomy lateral. In one case the patient was aged 55, of a broken-down constitution, who was with great difficulty brought under the influence of chloroform; he did fairly well for 24 days, after which exhaustive diarrhœa set in and carried him off. In the other case, a child of 6 years of age, septic peritonitis set in soon after the operation, which speedily proved fatal. There was nothing in the operation itself, which was performed with due care, to account for the complication. 8 *deaths* occurred in cases of *amputations of the lower limbs*, 3 of the thigh and 5 of the leg; of the thigh cases one was a case of primary amputation performed in a patient who was brought by the Police with compound dislocation of the knee-joint and rupture of the popliteal artery, the result of a bag of grain falling on him. He was very weak and faint from loss of blood when brought in. Though the operation was performed after he partially rallied, yet traumatic delirium set in and he died the next day. The other was also a case of primary amputation of the thigh. The patient was knocked down by a tram car and sustained extensive injuries to the bones and the soft parts of the thigh right up to the groin; the injured limb was removed from near the hip joint, the patient dying in a state of collapse 3 hours after the operation. In the third thigh case the knee-joint was thoroughly disorganized, the patient being at first averse to amputation, the pus was let out, the cavity was drained and disinfected and the part kept at rest. These measures failing, secondary amputation through the lower part of the thigh was performed. The man died exhausted two days after the operation. Of the 5 deaths occurring after amputations of the leg, four were for gangrene, and the amputations were performed through the knee in two cases, and through the leg in the other two. One of these patients was a confirmed opium-eater, one a half-starved pilgrim and one had elephantiasis of the leg which ultimately became gangrenous. They were all in a very bad state of health, having put off the evil day of the amputation for a long time, consenting only when they could see and feel that the limbs were useless, disgusting and nauseous encumbrances, and their general health was at the lowest ebb, and that no applications by the bazaar quacks had any effect. Operations performed, under such circumstances, could have only one result, but still they were done to afford them the last if only a slender chance. The fifth case was one of extensive crush of the foot and lower part of the leg; amputation was performed at the upper third of the leg and the patient got on fairly well and the stump, which gave great trouble at first, ulti-

mately healed up, when one day, fidgety and restless and troublesome as the patient was, he tried to walk and fell on the floor injuring the stump and the thigh. A large abscess formed on the thigh, which was speedily followed by a large parotid bubo; the large abscesses were opened and drained, but the patient died exhausted by the profuse discharge of pus from them. One death occurred after opening the bladder by the lateral perineal incision. This was done for a case of enlarged prostate in which suddenly hæmorrhage occurred from the prostate, the blood distending the bladder and causing it to reach very nearly the umbilicus in the form of a solid tumour. The clots were turned out and the bladder was emptied and the patient was greatly relieved, but the great loss of blood that had occurred before the operation was performed prevented the patient from rallying. One death occurred after amputation of the penis for cancer. This patient, who was a Parsee aged 59 years, had been operated on before elsewhere for the same disease. At the last recurrence he came to this hospital. The penis was amputated high up by the flat method, the urethra being properly secured first. The wound healed, though after great difficulty; and there was no trouble in passing water; but unfortunately whilst under treatment acute rheumatism with cardiac disease supervened and the patient died really of this last complication. One death occurred after ovariotomy. This was done in a Boree woman aged 30 for a multilocular ovarian cyst. The cyst had most extensive adhesions all round and was particularly adherent to the bladder and the uterus. There was no pedicle and so the body of the cyst had to be tied in separate portions after scraping away the lining membrane. Though all antiseptic precautions were taken, yet the separation and tying of the extensive adhesions, the scraping of the lining of the cyst and the leaving behind of large portions of the adherent and sessile cyst involved so much unavoidable disturbance of the peritoneum that traumatic peritonitis set in, the patient dying a week after the operation.

All the operations were performed with the modern antiseptic precautions such as could be taken with the available materials and assistance. Of the one hundred major operations the important ones were in the following order:—

Amputation 26, with 8 *deaths*; of these 26 amputations, 8 *were of the upper extremity*, including one of the arm and one of the forearm, all recovering; and 18 *of the lower extremity*, including five of the thigh, of which 2 recovered and 3 died, 6 of the leg with three deaths, 2 through the knee joints both dying, and 5 of the foot and toes, including one syme, all recovering. The mortality of amputations was thus 30·8 per cent., which was confined only to the operations on the lower extremity.

Operation for calculus in the bladder 15. Of these 11 were lateral *lithotomies* with 2 deaths, 1 vaginal lithotomy and 3 litholapaxy; these last four were discharged cured.

Operations of Removal of Tumours 13 (with 2 deaths). Of these 13 operations the principal ones were for cancers 5, two of the penis with one death, and 3 of the breast all recovering; 1 was a case of sarcoma of the abdominal wall, the patient recovering; 1 was a case of multilocular ovarian cyst without a pedicle which proved fatal; 1 was for hypertrophy of the labia forming large fibrous masses on each side.

Operation for Hepatic Abscess 11. The abscesses were opened by the knife and drained and their cavities kept sweet and disinfected. Of these 4 died, and of the rest one left the Hospital without permission before he was thoroughly cured, and the rest were discharged cured.

Operations for Hæmaloceles 8. These were old standing cases with thickened and calcareous walls, and thick purulent and tarry contents. They were all thoroughly laid open and drained and allowed to heal from the bottom. All recovered.

Reduction of Dislocations 5. Of these one was of the hip reduced by extension and manipulation combined, 2 of the shoulder and 2 of the radius, reduced by manipulation under chloroform. All recovered.

Removal of Hæmorrhoids by the clamp and cautery 3.

Forcible dilation of urethra for stricture by Hall's method 2. In one case of urethral calculus was removed by the knife; in one case extensive cicatrices of the thigh pubes, and lower part of the abdomen, caused by burns, forming a sort of apron, hiding the penis and scrotum behind, and extending some way down the thighs were dissected out, the hidden parts liberated and the thick cicatricial tissue removed. In one case of imperforate anus the parts were dissected, the fæcal pouch was struck, and the patient relieved. In one case the metatarsal bone of the foot was excised for disease. In one case of chronic suppurative otitis, the mastoid cells were trephined, the patient leaving the Hospital well after the operation. In one case abscision and in another extirpation of the eye-ball were done for disorganization of the eye-ball. In one case of depressed fracture of the skull giving rise to symptoms of compression, the depressed portions were elevated after using the saw, the patient being immediately relieved and ultimately discharged cured. In one case a deeply seated sequestrum in a case of necrosis of the shaft of the tibia was removed after opening up the cloacæ.

7. MORTALITY AND ITS CAUSES.—There were in all 322 deaths, or 10·2 per cent. to total treated. This percentage is slightly higher than that of the previous year, which was 9·2. Of the total number of deaths 60 occurred within 24 hours, 87 within four days and 175 above a week after admission; nearly a third of the deaths thus occurred within four days, showing the hopeless nature of many of the cases admitted. The Hospital is situated where many beggars congregate, and it is very near where pilgrims

coming back from Mecca in a hopelessly bad state of health land. Hence many half-starved beggars, when they are so ill that they could no longer beg, come to the Hospital, or are picked up lying in the street or in the gutters by the Police and brought hither. Their state of health could be easily imagined, and they readily succumb to any severe illness that attacks them. Similarly pilgrims are brought by the Police, or totter of their own accord to the Hospital in a frightfully bad state of health, filthily dirty, covered with skin diseases and sores, scorbutic, emaciated and looking the very picture of misery. They swell the mortality of this hospital to no small extent every year. This year there was a large influx of them in the hospital. Most of the deaths occurred amongst these two classes of people and also amongst a class of people who, after travelling long distances, arrive in Bombay by the two great lines of railways, nearest whose termini this hospital is situated, in search of food and employment which they could not get in their own districts. The largest number of deaths occurred in the months of August, October, and November, October being the worst month in that respect. This was probably due to a larger number of cases of the kind above mentioned, seeking admission in the rainy months of the year for the sake of shelter as well as food and treatment. The lowest mortality was in the month of February. The principal diseases, &c., which caused the largest number of deaths were in the following order: [1] Diarrhœa 60 deaths ; [2] Tubercle 44 ; [3] surgical injuries 33 ; [4] Privation 24 ; [5] Remittent fever 22 ; [6] Dysentery 21, [7] Pneumonia 16 ; [8] Tetanus 9 ; [9] Bronchitis, chronic 7 ; [10] Valvular diseases of the heart 6 ; [11] Opium poisoning 5 ; [12] Burns 5 ; [13] Abscess of the liver 4.

8. VACCINATION is not practised in this Hospital.

9. CONDUCT OF THE ESTABLISHMENT.—Senior Apothecary Mr. C. Easdon performed his own duties as usual with exemplary regularity, punctuality, zeal, ability, and careful consideration for the patients' comfort and welfare. He also assisted me in my work very ably and with unfailing courtesy and kindness. The Surgeon-General very kindly placed at my disposal the services of several different Assistant Surgeons from time to time as far as the exigencies of the service allowed, and they each and all gave great and able assistance. I may mention three principal names in this connection, *viz.*, Messrs. Engineer, Moollan and Bharucha.

Mr. Balkrishna, the Steward, performed his duties as usual with care, and neither I nor the patients had any complaint about the food or the clothing to make against his department. He is a very honest and careful steward. He was zealously and satisfactorily assisted by Mr. Pestonjee Framjee.

The head writer, Mr. J. F. Rodrigues, performed his heavy duties very regularly and efficiently and gave me every satisfaction.

Of the many Hospital Assistants attached to the hospital at different times during the year, I may single out the names of

Nagoo Luxamon and Vithul Lingoo as having given me entire satisfaction. They were steady, hardworking and practical and took great care of the patients. I have not known the rest sufficiently long to give an opinion about their work.

The four nurses attached to this hospital performed their duties with great care and to my entire satisfaction.

10. GENERAL OBSERVATIONS.—The expenses were kept within bounds. The cost of diet per head per diem was 3 annas and one pie.

D. N. PARAKH, Surgeon-Major,
Surgeon to the Goculdas Tejpal
N. G. Hospital.

BOMBAY, 18*th January* 1893.

No. 4642. *Resolved*: "That the report of the working of the Goculdas Tejpal Hospital for 1892, be passed on to the Corporation."

Considered the Progress Reports, up to the end of June 1893, of new works now in course of construction.*

No. 4643. *Resolved*: "That the Progress Reports of new works in course of construction, up to the end of June 1893, be *recorded*."

No. 4644. *Resolved*: "That the following be *recorded*:—Memorandum No. 9593, dated 8th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the transfer (*a*) of Rs. 1,00,000, from the 44 Lakhs Sanitary Works Loan deposit account No. 1, to the Municipal General Fund pass book, on 3rd instant; (*b*) Rs. 56,937-9-3, from ditto to ditto, on 5th idem."†

No. 4645. *Resolved*: "That the following be referred to the Sub-Committee, appointed to report on the question of the improvement of Matharpakhady:—Letter, dated 7th instant, from Messrs. Pestonji Dadabhoy Sett, Jamsetji Dadabhai Patel and others, on the subject of widening Matharpakhady Road."

Considered again the rules prepared by the Commissioner, for the systematic keeping of stores accounts of the Municipality.

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* *See* Appendix D.

† The Chief Accountant reports to the Commissioner that the balances remaining after effecting the above transfers are:—In 4 per cent. Government Paper, for Rs. 4,74,000=Rs. 4,63,914-14-5.

Proposed by G. W. Roughton, Esq., seconded by Grattan Geary, Esq.—

"That, in the opinion of the Standing Committee, the rules prepared by the Commissioner for the systematic keeping of the stores accounts of the Municipality are not such as require the sanction of the Committee under section 123 of the Municipal Act.

No. 4646.

"That the Commissioner's letter No. 8607, dated 26th ultimo, be *recorded*."

Carried.

Resolved: "That, as applied for by the Commissioner, in his letter No. 10016, dated 14th instant, the Corporation be recommended to sanction the purchase, through the agency of Major Tulloch, R.E., of a stone-breaking machine, 12″×8″, with a 6-ton roller, at a cost of £603 15*s.* 6*d.* (Rs. 9,056-10-0), instead of one of 20″×10″ as provided in the Budget. The amount to be met out of the Budget provision of Rs. 9,270."

No. 4647.

The following return was read and *recorded* :—

Return of fire at Sheik Memon Street Cloth Market, forwarded with the Commissioner's memorandum No. 9676, dated 8th August 1893.*

No. 4648.

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 13th August 1893.

BOMBAY, 23*rd August* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L. M. ; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 16th instant, were signed.

The seal of the Corporation was affixed to 444 debentures of the 42 Lakhs Loan, Nos. 2927/28 to 3165/66, 7180/81 to 7426/27, 7572/73 to 7938/39, and 8361/62 to 8391/92, of Rs. 1,000 each ; (2) to 76 ditto ditto, Nos.

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* *See* Appendix **C**. † *See* Appendix **B**.

8273 to 8340 and 8393 to 8400, of Rs. 500 each; and (3) to 2 ditto ditto, Nos. 8341/50 and 8351/60, of Rs. 5,000 each.

No. 4856. The seal was also affixed to deed of contract with Messrs. Killick, Nixon & Co., for the supply of 500 tons of coal.

No. 4857. *Resolved* : " That, as applied for by the Commissioner, in his memoranda No. 10109, dated 15th instant, and Nos. 10260, 10261, 10262, dated 17th idem, and No. 10363, dated 19th of the same, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of owners.	Where.
Syed Nadershah Ameer Allisaheb	Building at No. 223, Samuel Street.
Mr. Abdul Hussain Heptula ...	„ at Khetwadi 10th Lane.
„ Bhicoo Mankoji	„ at Parbhadevi Road.
„ Runchordas Haridas ...	„ at Trimbuck Purushram Street.
„ Narandas Kaliandas ...	„ at Chaopati Road."

No. 4858. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 10635, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

It was agreed that the further consideration of the following be postponed until next week :—Memorandum No. 10053, dated 14th instant, from the Commissioner, forwarding statement of lapsed grants payable out of current revenue and loan funds for 1892-93 and previous years, which require to be renewed in 1893-94.

No. 4860. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 10031, dated 14th instant, sanction be given, under section 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Karim Mahomed Jamal, Husein Jamal, and Ahmed Jamal, for the recovery of Rs. 266-15-0, being the amount of property taxes due in respect of house, B Ward, No. 208, Nagdevi Road, as per statement submitted with the letter."

No. 4861. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 10086, dated 15th instant, sanction be given, under sections 211 and 517 (*j*) of

the Municipal Act, to a suit being filed in the Court of Small Causes against Husen Karim Mahomed, Vazir Karim Mahomed, Piru Karim Mahomed, and Ahmed Karim Mahomed, for the recovery of property taxes and notice fees, amounting to Rs. 498-8-3, due in respect of house, B Ward, No. 309, Nagdevi Road, as per statement submitted with the letter."

No. 4862. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 10405, dated 19th instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. William Tate, for the recovery of Rs. 6, being the amount of tax on one horse for the quarter ending 30th September 1890."

No. 4863. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 10402, dated 19th instant, and under sections 211 and 517 (*j*) of the Municipal Act, sanction be given to a suit being filed in the Court of Small Causes against Mr. Amirudin bin Mahomed Hoosein, for the recovery of property taxes and notice fees, amounting to Rs. 33-5-0, due in respect of house, G Ward, No. 5083, as per list submitted."

Read letter No. 10431A, dated 21st instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to report, for the information of the Standing Committee, under the terms of section 64 (3) (*c*) of the City of Bombay Municipal Act, that I ordered provisions from Messrs. Kemp & Co., at a cost of Rs. 546-5-0, to be supplied to Troops, Blue Jackets, Volunteer Corps, &c., that were engaged to guard Cumballa and Malabar Hills, Mahaluxmi and Worli during the recent riots from the 12th to the 17th instant.

Looking to the emergency and the inconvenience and hardship that would have been caused to the troops, &c., I thought it advisable to incur the expenditure by exercising the power conferred upon me under the section quoted above. The amount will be met from the surplus cash balance. The troops were ordered out in great haste and before proper arrangements could be made for their rations.

A surplus of about 4½ lakhs has accrued since the publication of the Revised Estimates for the year 1892-93, out of which Rs. 66,531-12-0 have been sanctioned, and a sum of Rs. 30,011 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 4864. *Resolved*: "That letter No. $\frac{A.}{10431}$, dated 21st instant, from the Commissioner, to the Secretary, be *recorded*."

Read letter No. 10504A, dated 21st instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to inform you that, during the first four days of the late riots, troops were conveyed by the Tramway Company, without charge ; but it was then intimated that a charge must be made, and having regard to the extreme importance of (*a*) moving troops as rapidly as possible and (*b*) conveying them to their posts as fresh as possible, I authorised the use of the tramway, under passes to be issued from the Military Head Quarters, as a charge upon the City and for the safety of life and property under section 54 (*c*) of the Municipal Act, I have further directed the Executive Engineer, under the same section, to erect shelter-sheds for the troops at a large number of points in the City, such being absolutely required to protect them from the weather, as well as one or two smaller sheds to serve as latrines. Such sheds were only erected at places where it was reported to me by the Deputy Assistant Adjutant-General that accommodation did not exist. It is impossible for me to state even approximately what the cost of these measures may amount to but I will report it as soon as I can.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That the consideration of letter No. 10504A, dated 21st instant, from the Commissioner, be postponed pending the receipt of details as to the expenditure involved."

No. 4865.

Considered letter No. 10480, dated 21st instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honour to state that at present there are no equivalent weights of 4, 8, 10, 20 and 40 seers, and that I propose, under the provisions of section 418 (1) of the Municipal Act, to provide them, in addition to those now in use, and to substitute for the phara (dry) measure containing 16 pailis or 3,145 cubic inches, a phara (dry) measure, containing 17 pailis or 3,341·52 cubic inches. The phara measured 17 pailis when the duty of keeping local standards of weight and measure rested with the Commissioner of Police. The cost of the weights and measure above referred to is estimated by the Mint Master at Rs. 444, to which I request the sanction of the Standing Committee and the Corporation.

The amount can be met out of the surplus cash balance. A surplus of about 4½ lakhs has accrued since the publication of the Revised Estimates for the year 1892-93. Out of this sum, Rs. 66,531-12-0 have already been sanctioned, and an expenditure of Rs. 30,557-5-0 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That, as applied for by the Commissioner, in his letter No. 10480, dated 21st instant, the Corporation be recommended to sanction the payment of Rs. 444, out of surplus cash balance, to meet

No. 4866.

the cost of providing equivalent weights of 4, 8, 10, 20 and 40 seers, in addition to those now in use, and to substitute for the phara (dry) measure containing 16 pailis, or 3,145 cubic inches, a phara (dry) measure containing 17 pailis, or 3,341·52 cubic inches."

Considered letter No. 10021, dated 14th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to Corporation Resolution No. 1527 of 15th May, I have the honour to submit plans and estimates from the Executive Engineer, the latter amounting to Rs. 5,046, for a cage for the pair of Kathiawar lions promised by His Highness the Nawab of Junagadh. The plans have been prepared in consultation with Mr. Phipson, and every effort has been made to keep down expenditure, so far as it can be done consistently, with providing a suitable cage for a valuable pair of animals. His Highness the Nawab has been kind enough to contribute Rs. 2,500 towards the cost of a cage, and the balance, Rs. 2,546, can be paid for out of surplus cash balance, to the debit of the Garden Fund. This fund now amounts to Rs. 59,503, including sums for works in progress.—I have, &c., H. A. ACWORTH, Commissioner.

No. 4867. *Resolved* : " That letter No. 10021, dated 14th instant, from the Commissioner, be forwarded to the Corporation, with the recommendation that sanction be given to the expenditure of Rs. 2,546, from surplus cash balance (to the debit of the Gardens Fund), towards the cost (Rs. 5,046) of constructing a cage for the two Kathiawar lions, to be presented to the Municipality by His Highness the Nawab of Junagadh, the balance, Rs. 2,500, of the cost of the cage being paid by His Highness."

No. 4868. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 10324, dated 17th instant, and under the terms of section 69 (*e*) of the Municipal Act, sanction be given to the variation of contract with Mr. Sayaji Naguji, for the filling in of Sankli Tank, whereby the period for the completion of the work will be extended from 15th June to 15th September 1893."

No. 4869. *Resolved* : " That the following be *recorded* :—Letter No. 10237, dated 17th instant, from the Commissioner, reporting that he has sold the right of cutting grass, up to 30th September 1893, from the Municipal ground, measuring about 14,363 square yards, south of the Great Eastern Mill, Parel Road, to one Aboo Rama for Rs. 54."*

* The right has been sold for the first time this year.

Resolved : "That the following be *recorded* :—Letter
No. 4870. No. 10389, dated 19th instant, from the Commissioner, reporting that he has sold the right of cutting grass and catching fish on the Tansa line between Ghat Kopar and Kurla cutchra ground, up to 31st January 1894, to one Dama Paulo Matra for Rs. 40."*

Resolved : "That the following be forwarded for the
No. 4871. information of the Corporation :—Memorandum No. 10486, dated 21st instant, from the Commissioner, reporting on petition addressed to the Corporation by ratepayers and residents of Upper Mahim, complaining of the condition of certain private roads thereat and the manner in which the gas and kerosine lamps of the streets are lighted."

Resolved : "That the following be laid on the table :—
No. 4872. Letter, dated 17th instant, from Messrs. Ardaseer Framjee Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of July last and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statement of their scrutiny of accounts."

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 20th August 1893.

Resolved : "That, as applied for by the Commissioner,
No. 4873. in his letter No. 10499, dated 21st instant, sanction be given to the acceptance by him, of the tender of Messrs. Mistri, Bhedwar, Vachaghandy & Co., the lowest of the five tenders received, for the construction of pipe sewers, storm-water drains, manholes, &c., in Connaught and Sussex Roads, at rates aggregating Rs. 30,577."

Resolved : "That the following be *recorded* :—Letter
No. 4874. No. 10561, dated 22nd instant, from the Commissioner, reporting that he has accepted the tender of Messrs. Framji, Mahomed Ali & Co., the lowest of the three tenders received, for the work of earth filling on the Tansa pipe line near Kurla, for Rs. 2,150."

* Last year the sale realised Rs. 44.
† *See* Appendix B.

BOMBAY, 30*th August* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., LC.S., Commissioner ; the WATER ENGINEER ; and the SECRETARY.

The minutes of the meeting held on the 23rd instant, were signed.

Resolved : " That, as applied for by the Commissioner, in his memorandum No. 11204, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 5008.

Considered the following :—

LAPSED GRANTS REQUIRING RENEWAL.

Memorandum No. 1785, dated 11th August 1893.

TO THE COMMISSIONER.

SIR,—With reference to the Standing Committee's Resolution No. 108, dated 5th April 1893, I have the honour to forward the accompanying two lists, marked A and B, showing the grants for the past official year, payable out of current revenue and loan funds respectively, which remained unexpended before the close of that year, but which will probably have to be spent during the current year, and to request the favour of your obtaining formal sanction of the above body to the renewal of the same.

2. From list A it will be observed that the liabilities payable during 1893-94 on account of the Budget heads mentioned therein aggregate Rs. 3,55,295-10-11 (including Rs. 1,08,469-2-10 on account of new works and Rs. 1,42,459-12-2 on account of unpaid interest and debt charges) against the lapsed grants of those heads, amounting to Rs. 3,92,597-10-5, and that the saving of Rs. 37,301-15-6 along with the lapsed grants of other budget heads not requiring renewal, either wholly or partly, has helped to increase our surplus cash balance.

3. It may, however, be pointed out that the amount of lapsed grants (payable out of current revenue) requiring renewal this year is less than that renewed last year by Rs. 1,89,432-3-2, and is the lowest of similar grants renewed since 1884-85. Deducting Rs. 2½ lakhs for new works and interest and debt renewals, and about Rs. 35,000 to be renewed for the Garden Fund, the renewals of other ordinary grants amount to Rs. 70,000 (Rs. 36,000 for Streets and Buildings, Rs. 25,000 for Water Works, Rs. 6,000 for Drainage

and Rs. 3,000 for Miscellaneous). There would be a great reduction even in these renewals if strenuous efforts were made by the Engineer's Department to get all the new works, &c., some of which were sanctioned three or four, and in some cases five, years ago, completed and paid for before the close of the current official year.

4. I also beg to bring to your notice that a large portion of the paving grant has to be renewed every year owing to the budget grant not being fully utilized within the year. The tenders for last year were accepted so late as 24th August and 14th and 21st September 1892, and those for the current year have been opened by you yesterday, which is an improvement on last year, but I think it would be well in future if nearly half a year or more were not lost in settling preliminaries, and as soon as the Budget is laid by you before the Standing Committee, proposals for works ought to be kept ready in order to enable tenders being called for such works as soon as the Corporation sanction the Budget in February. The Engineer's Department would thus have a full year to get the works completed and paid for before the expiry of the official year so that the necessity of renewing the unexpended balance of the grants in the following year may be avoided where practicable.

5. I further beg to state that in addition to the lapsed grants, aggregating Rs. 34,655-0-10, on account of the maintenance of the Victoria Gardens, including new works thereat, as shown in List A, there was a further sum of Rs. 24,848-10-1 available for reappropriation with Corporation's sanction on garden improvements out of the garden receipts, fees, &c., for the past three years (Rs. 9,127-9-5 for 1890-91, Rs. 8,723-12-5 for 1891-92, and Rs. 6,997-4-3 for 1892-93), which have been credited to the Garden Fund as decided in the Corporation's resolution No. 7057, dated 17th February 1890.

6. If you desire to spend the latter sum of Rs. 24,848-10-1, together with the actual savings, which I believe are very large, on the amount of Rs. 34,655-0-10 proposed to be renewed as above during the current year on any improvement works at the gardens, sanction of the Standing Committee and the Corporation will have to be obtained thereto.

7. The lapsed grants payable out of Loan Funds, &c., aggregate Rs. 30,38,409-7-0, out of which Rs. 29,81,240-12-2 will have to be renewed during the current year as per List B. I shall address you separately on the subject of the savings on the different Loan Works.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

MEMORANDUM No. 10053 of 14th August 1893.

Forwarded to the Standing Committee for favour of sanction.

H. A. ACWORTH, Commissioner.

A.

List of Lapsed Grants for 1892-93 and previous years (payable out of Current Revenue) to be renewed during 1893-94.

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
Corporation and Standing Committee Establishment.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Section IV.—Contingencies, Stationery, Printing, &c. For printing the proceedings of the House Connections Committee and short-hand writer's fees		985 2 6		985 2 6		The work of the Committee was not finished by the end of 1892-93.
Maintenance of Public Gardens. A—*Victoria Gardens. Maintenance.*						
Section I.—Establishment	2,062 8 2		2,062 8 2			Savings from the pay of absentees, &c., required for extra labour in making alterations, cleaning and weeding shrubberies in the rainy season.
„ II.—Stores and Petty Charges ...	3,506 7 6		3,506 7 6			Required for the feed of new animals that may be bought or presented during the current year; for the purchase of red earth for gradually raising the shrubberies in the lawns and for the purchase of new rare animals whenever available.
„ III.—Seeds and Plants	739 1 11		739 1 11			Required for the purchase of roses and other plants to add new species to the Garden collection and for painting labels of the names of plants and printing catalogue which has been deferred until all the plants have been identified and named.
„ IV.—Repairs—Monsoon repairs, painting seats, &c., and repairs to buildings, &c.	46 11 8		46 11 8			

"	V.—Water-supply—B. Water pipes...	24	11	3			24	11	3			Required for extending the pipes wherever necessary.
		6,379	8	6			6,379	8	6			
	New Works.											
	New roads	4,712	15	0			4,712	15	0			Work in progress.
	Planting and turfing of the new ground... ...	1,000	0	0			1,000	0	0			Will be commenced as soon as the filling in is completed.
	Filling in low ground	11,498	14	3			11,498	14	3			Work in progress.
	Extending Fernery...	97	12	3			97	12	3			Required for completing the laying out of the Fernery.
	Turnstiles	300	0	0			300	0	0			Will be required for new turnstile for the gates in the portion required for the extension of the Garden.
	Special repairs and alterations to Victoria Garden roads	22	1	8			22	1	8			
	Wall and fencing round the Victoria Gardens ...	1,322	10	0			1,322	10	0			
	Quarters for the Garden Staff	381	9	2			381	9	2			
	Laying 12" stoneware pipes in the Victoria Gardens	163	5	2			163	5	2			
	Constructing ostriches' shed in the Victoria Gardens	100	7	11			100	7	11			
	Do. deer shed in the Victoria Gardens...	15	8	0			15	8	0			
	Do. aquatic birds' cages...	130	14	8			130	14	8			
	Do. cages for small mammalia	207	2	2			207	2	2			
	Do. do. do. ...	30	6	10			30	6	10			
	Do. bears' cage	545	8	11			545	8	11			
	Do. wild beasts' cage	3,970	1	11			3,970	1	11			
	Do. a new bungalow for the Superintendent at the Victoria Gardens	1,070	2	0			1,070	2	0			Work completed, final accounts being adjusted.
	Erection of a refreshment-room in the Victoria Gardens	677	1	10			677	1	10			Do. do. do.
	Construction of a drain for cages in the Victoria Gardens	1,649	7	6			1,649	7	6			
	Erection of a 3-chamber latrine on the water-closet system in the Victoria Gardens... ...	379	7	1			379	7	1			
		28,275	8	4	34,655	0 10	28,275	8	4	34,655	0 10	
	Carried over ...				35,640	3 4				35,640	3 4	

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...		35,640 3 4		35,640 3 4		
Municipal Engineer's Department, Drainage. Miscellaneous Drainage.						
Section III.—Repairing and altering miscellaneous drains and gutters ...	2,718 11 8		1,358 0 0			Some of the repairs works sanctioned in 1892-93 were not completed before the close of the year and are still in progress.
„ VIII.—Altering drainage arrangements at Falkland Road...	4,910 3 4		4,910 3 4			The work is stopped, pending removal of certain Government property which intervenes.
		7,628 15 0		6,268 3 4	1,360 11 8	
Water Works, Maintenance.						
„ IV.—A—Repairs, alterations and other works in connection with tanks, wells and fountains...	2,661 4 5		2,661 4 5			Work in progress.
„ IV.—B—Repairs to Water Works Buildings	2,096 2 3		1,891 8 0			The painting of the roof of the settling basin is still to be taken in hand.
„ V.— Do. Tulsi Main Embankment	20,039 8 4		20,039 8 4			Work in progress.
		24,796 15 0		24,592 4 9	204 10 3	
Streets and Buildings.						
C.—*Road Watering.*						
Section VI.—New water tanks and Persian wheels		8,227 1 9	-	7,045 6 1	1,181 11 8	Work completed in 1893-94.

D.—Road Repairs and Maintenance.						
Section III.—Paving footpaths	22,125 15 4		22,125 15 4			Work in progress.
„ X.—Roadside trees' fencing and maintenance	2,440 11 11		1,150 0 0			The supply of new tree-guards was completed by Messrs. Byramji Jehangir & Co. in May 1893.
		24,566 11 3		23,275 15 4	1,290 11 11	
E.—Street Improvements.						
Purchase of tinplates and street boards		6,024 11 3		6,024 11 3		Required to meet payments for supplies ordered from Messrs. Latham & Co. and Mr. Shankarrao Babu Mandrupkar.
New Works.						
Extension of the retaining wall at Walkeshwar Road	3,177 13 0		3,177 13 0			The construction was delayed for a short time to see whether it would be advisable to change the line of the wall.
Reconstructing a portion of Gibbs Road ...	25,575 7 10		25,575 7 10			Work in progress.
Construction of a depôt or godown at Bellasis Bridge for storing kerosine-oil cases	2,646 14 4		2,646 14 4			Do. do.
Filling in Municipal ground and building a retaining wall in front of house of Mr. Jaikisondas Gungadas at Walkeshwar	4,661 8 0		4,661 8 0			By the construction of this wall, the light and air of the adjoining property of Mr. Jaikisondas Gungadas would have been shut out. This matter was referred to the Municipal Commissioner, the Solicitors and the Collector of Land Revenue. The question was finally disposed of, and the order to commence the work was given on 13th February 1893.
Engineer's quarters at Love Grove	8,952 4 2		8,952 4 2			Work completed; final accounts not adjusted.
Chawl of 17 rooms at Love Grove	981 3 5		981 3 5			Work completed by Messrs. Gungaram Luxuman & Co. A one-chamber water-system latrine for the chawl is being constructed.
Carried over ...	45,995 2 9	1,96,884 9 7	45,995 2 9	1,02,846 12 1	4,037 13 6	

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...	45,995 2 9	1,06,884 9 7	45,995 2 9	1,02,846 12 1	4,037 13 6	
Closing up with C. I. the perforations in manhole covers	2,188 0 7		2,188 0 7			Work entrusted to Messrs. Richardson & Cruddas is in progress.
Ventilating shafts on Ripon Road sewer ...	2,922 11 8		2,000 0 0			Tender of Messrs. Mistri, Bhedwar & Co. was accepted, and the work is completed ; accounts are to be adjusted.
Filling and pitching slopes of portions of Haines Road	4,474 8 11		3,000 0 0			Work not undertaken, pending consideration of Mr. Baldwin Latham's Report. Tender of Mr. Dossabhoy Burjorji Padhra has now been accepted. Work is in progress.
Arrangements to flush Parel and Bellasis Road storm-water drains, &c.	2,435 13 9		2,435 13 9			The work of Babula Tank is completed. The work at Nagpada Tank has now been ordered to be entrusted to the Petty Works Contractor.
New miscellaneous drainage works	2,303 5 0		466 0 0			Work in progress.
Laying a 4″ service main at Carnac Bunder Pumping Station	800 0 0		450 0 0			Accounts are to be adjusted.
Latrines and urinals	27,971 10 5		22,344 15 11			Contract for latrines and urinals in Erskine, Picket and Mazagon Roads and Jackeria Musjid Street given to Messrs. Mistri, Bhedwar & Co. The work of construction of latrines and urinals at Mombadevi Road is stopped, as per Commissioner's recent orders. Tender of Mr. Sorabji Jamshedji for construction of latrines and urinals in Kennedy Sea Face Garden has been accepted, and this work is in progress.

New nightsoil depôt at the north end of DeLisle Road	15,072	3	11			12,000	0	0				The work, which was entrusted to Messrs. Spencer & Co., was not completed at the end of the past year.
Constructing a Mangalore-tiled roof over the Small-pox Hospital at Arthur Road	2,023	5	1			1,413	3	8				Messrs. Warden & Co.'s bill received on 19th April 1893.
Fencing the Municipal ground at Dadur. ...	572	0	0			572	0	0				The ownership of the ground has been disputed by Mr. Shapoorji Jamshedji. The work will be commenced after the question is settled.
Post hydrants, buckets, &c., for extinguishing fires at the Arthur Crawford Markets and fire buckets with brackets for extinguishing fires at the Fort and other Markets...	9,294	0	0			6,203	0	0				Work recently taken in hand as sanctioned in Corporation's Resolution No. 11767, dated 6th February 1893.
Purchase of land at Pinjrapole Street, required as a site for a public latrine	5,600	2	7			5,600	2	7				Private negotiations to acquire this land having failed, the Collector was requested to acquire it under the Land Acquisition Act. The owners are reported to be not in Bombay and their representatives have asked for the postponement of the hearing before the Collector for three months.
	1,21,653	0	8			1,64,668	7	3				
New Works—Water Works.												
Pointing with Indian patent stone the walls of the settling and distributing basins of the Bhandarwada Reservoir	4,421	0	0			1,780	0	0				Work completed in 1893-94.
Construction of a chawl at Vehar	1,420	11	7			1,420	11	7				Claims for compensation for land taken up not yet settled as there are cases before the Court.
Additional catch-water channels at Vehar ...	600	0	0			600	0	0				
	6,441	11	7	1,28,094	12	3	3,800	11	7	1,08,169	2 10	19,625	9 5
Carried over ...				2,34,979	5	10				2,11,315	14 11	23,663	6 11

	Balance of the Grant lapsed.	Total Amount lapsed.	Amount to be renewed.	Total Amount to be renewed.	Savings on the Grant lapsed.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...		2,34,979 5 10		2,11,315 14 11	23,663 6 11	
Infectious Diseases.						
Two disinfecting chambers		1,519 15 10		1,519 15 10		The work has not yet been completed.
Municipal Debt.—Interest on Loans.						
Drainage Loan of 1878	14,725 0 0		14,725 0 0			The interest was not claimed during 1892-93.
44 Lakhs Sanitary Works Loan	18,537 8 0		18,537 8 0			
7 Do. do. do.	20,312 8 0		20,312 8 0			
Tansa Water Works Loan...	60,659 0 7		47,020 8 0			
12 Lakhs Drainage and Water Works Loan ...	8,775 0 0		8,775 0 0			
35 Lakhs Various Sanitary Works Loan ...	30,572 1 4		30,572 1 4			
6 per cent. Local Loans	17 2 10		17 2 10			
	1,53,598 4 9		1,39,959 12 2			
Repayment of Loans.						
Drainage Loan of 1878	2,500 0 0		2,500 0 0			One debenture for Rs. 500 has been paid off during 1893-94, and the balance has not yet been claimed.
		1,56,098 4 9		1,42,459 12 2	13,638 8 7	
Grand Total...		3,92,597 10 5		3,55,295 10 11	37,301 15 6	

B.

LIST of Lapsed Grants on account of different Loan Works, &c., for 1892-93 and previous years, which require to be renewed during 1893-94.

	Balance of the Grant lapsed.	Total Amount lapsed.	Total Amount lapsed under each Loan.	Amount to be renewed.	Total Amount to be renewed.	Total Amount to be renewed under each Loan.	Savings.	REMARKS.
17 *Lakhs Loan for Drainage (portion of the 27 Lakhs Loan).*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Pipe sewers	32,476 12 3			32,476 12 3				Work postponed pending enquiry into the House Drainage Connections system.
Establishment and Contingencies	1,343 6 9			1,343 6 9				
44 *Lakhs Sanitary Works Loan—Drainage Works.*		33,820 3 0	33,820 3 0		33,820 3 0	33,820 3 0	.....	
First Drainage Section—House sullage water connections without privy fittings	2,15,967 6 10			2,15,967 6 10				Works ordered to be proceeded with departmentally, but stopped, pending decision of the Corporation as regards house connections in general.
Automatic flushers at heads of gullies ...	5,570 0 0			5,570 0 0				
		2,21,537 6 10	2,21,537 6 10		2,21,537 6 10	2,21,537 6 10	.....	
7 *Lakhs Sanitary Works Loan.*								
Drainage of the Fort			50,535 0 9			10,000 0 0	40,535 0 9	Required for catchpits to be constructed.
Tansa Loan of Rs. 1 *Crore and* 47 *Lakhs, plus Rs.* 2,40,000 *sanctioned to be paid out of premia.*								
Tansa Water Works			1,18,085 10 7			1,18,085 10 7	.....	Some minor works require to be completed, and the final claims of the Pipe and Duct Contractors are still to be settled.
12 *Lakhs Drainage and Water Works Loan.*								
Queen's Road House Sullage Water Connections			2,27,770 4 3			2,27,770 4 3	.....	Rs. 15,000 are required for constructing catchpits and the works now in hand and the balance for the cost of a scheme for raising sewage in the Queen's Road by means of Shone system.
Carried over ...			6,51,748 9 5			6,11,213 8 8	40,535 0 9	

	Balance of the Grant lapsed.	Total Amount lapsed.	Total Amount lapsed under each Loan.	Amount to be renewed.	Total Amount to be renewed.	Total Amount to be renewed under each Loan.	Savings.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...			6,51,748 9 5			6,11,213 8 8	40,535 0 9	
Loan of Rs. 10,08,500 for Miscellaneous Works Markets.								
New Market at Colaba	50,050 0 0			50,050 0 0				Drawings in progress.
Arthur Crawford Market Extension	46,555 2 5	96,605 2 5		46,555 2 5	96,605 2 5			Work in progress.
Roads.								
Road through Naoroji Hill		2,63,800 0 0	3,60,405 2 5		2,63,800 0 0	3,60,405 2 5	.....	Negotiations are at a standstill.
Agripada House Sullage Water Connections Loan of Rs. 2,48,000.								
Agripada House Sullage Water Connections ...			26,633 10 1			10,000 0 0	16,633 10 1	House connections work is stopped in accordance with the Corporation's Resolution No. 3142, dated 30th June 1892.
35 Lakhs Various Sanitary Works Loan. *Water Works.*								
Pawai Water Works	2,08,396 11 10			2,08,396 11 10				Land compensation cases not yet settled.
Improvement Works at Malabar Hill Reservoir	7,303 4 10	2,15,700 0 8		7,303 4 10	2,15,700 0 8			Required for further work still to be undertaken.
Roads.								
Roads and streets in Agripada and elsewhere ...	5,43,278 12 11			5,43,278 12 11				Contract for the construction of the roads is being prepared.
Difference between the amount provided in the Loan of Rs. 10,08,500 for road through Naoroji Hill and the revised amount sanctioned for the same	68,148 0 0	6,11,426 12 11		68,148 0 0	6,11,426 12 11			Negotiations are at a standstill.

Drainage.								
Sewer flushing arrangements		4,715 6 10			4,715 6 10			Work is being executed departmentally and is stopped for the present, as the height of sewage in the sewers does not allow it to be carried out.
Markets.								
Bhuleshwar Market Extension	1,82,198 13 5			1,82,198 13 5				Drawings ready. The question of apportionment of cost referred to Government.
Foras Road Market	34,496 9			34,496 2 9				Work in progress.
Labourers' quarters in connection with the Arthur Crawford Markets	22,700 0 0	2,39,395 0 2		22,700 0 0	2,39,395 0 2			Tenders are to be re-invited.
Other Sanitary Works.								
Health Department stables and quarters for Scavengers...	1,50,000 0 0			1,50,000 0 0				Under consideration.
Chawl for Halalkhores in Kharsetji Suklaji Street	16,726 3 6			16,726 3 6				Extra work in progress.
Purchase of land at Arthur Road	23,676 0 0	1,90,402 3 6	12,61,639 8 1	23,676 0 0	1,90,402 3 6	12,61,639 8 1	.....	Owner is unwilling to sell.
Municipal Building Loan of 8 Lakhs.								
Municipal Office Building			2,16,310 13 0			2,16,310 13 0	.....	The work is almost completed. Final accounts to be adjusted.
4½ Lakhs Fire Brigade Loan.								
Land and Buildings for Fire Brigade			2,07,734 5 11			2,07,734 5 11	.....	Work in progress.
Works sanctioned out of Savings on former Loans.								
Construction of the residence of the Chief Inspector of Water Works	46,360 0 0			46,360 0 0				Work of filling in the Babula Tank is in progress.
Covering the storage basin of the Bhandarwada Reservoir and constructing filters over it	44,597 14 4	90,957 14 4		44,597 14 4	90,957 14 4			Detailed drawing, estimates, &c., are being prepared.
Carried forward ...		90,957 14 4	27,24,472 0 11		90,957 14 4	26,67,303 6 1	57,168 10 10	

	Balance of the Grant lapsed.	Total Amount lapsed.	Total Amount lapsed under each Loan.	Amount to be renewed.	Total Amount to be renewed.	Total Amount to be renewed under each Loan.	Savings.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Brought forward ...		90,957 14 4	27,24,472 0 11		90,957 14 4	26,67,303 6 1	57,168 10 10	
Main Sewerage, Parel	63,367 6 0			63,367 6 0				Work completed; account to be adjusted.
Branch Pipe Sewers at Parel	15,701 6 4			15,701 6 4				Work in progress.
Arching over Main Drain at Arthur Road ...	17,623 3 5			17,623 3 5				The contract work is now completed, but some extra work is in progress.
Storm-water Drain in Hornby Road from the Salvation Army Hall to Bazaar Gate Street.	9,698 4 4	1,06,390 4 1		9,698 4 4	1,06,390 4 1			Work completed on 25th March 1893. Final accounts are to be adjusted.
			1,97,348 2 5			1,97,348 2 5	.....	
			29,21,820 8 4			28,64,651 8 6	57,168 10 10	
Advances for works for which Loans are not sanctioned or raised.								
Connections at Chinchpokli between Vehar and Tansa mains...		2,947 11 10			2,947 11 10			Work in progress.
Pumps and Steam Engines required for the working of the Love Grove Pumping Station.		99,233 14 9			99,233 14 9			Work completed in 1893-94.
Improvements and Extension of the Victoria Gardens		1,974 15 6			1,974 15 6			Required for payment of Municipal Solicitors' charges.
			1,04,156 10 1			1,04,156 10 1	.....	
Loans Works Establishment Fund.								
Establishment for House Sullage Water Connections, First Drainage Section			12,432 9 7			12,432 9 7	.....	
Grand Total...Rs.			30,38,409 7 0			29,81,240 12 2	57,168 10 10	

Resolved : "That, as applied for by the Commissioner in his memorandum No. 10053, dated 14th instant, sanction be given to the renewal of lapsed grants for 1892-93, amounting to Rs. 3,55,295-10-11, as per detailed Statement A, accompanying the Chief Accountant's letter to the Commissioner, No. 1785, dated 11th idem. That sanction be further given to the renewal of lapsed grants for the same period, amounting to Rs. 30,38,409-7, payable out of Loan Funds, as per Statement B, ditto. That sanction be also given to the renewal of the available balance of Rs. 24,848-10-1 from the Victoria Garden receipts during the years 1890-91, 1891-92, 1892-93, as per the Corporation's Resolution No. 7057, dated 17th February 1890."

No. 5009.

Resolved : "That, as applied for by the Commissioner in his letter No. 10980, dated 28th instant, sanction be given to the acceptance by him of the tender of Messrs. Framroz Pestonji & Co., the lowest of seven tenders received for the construction of biggaries' chawls at Bori Bunder, at rates aggregating Rs. 58,839-8-3, *plus* Rs. 2,600 for certain items of work for which lump sums are given in the estimate, and which work will have to be done either through the contractors or departmentally."

No. 5010.

Resolved : "That, as applied for by the Commissioner in his letter No. 10981, dated 28th instant, sanction be given to the acceptance by him of the tender of Messrs. Tejoo Kaya and Tulsidas Khimji, the lowest of five tenders received for the construction of storm-water drains and new roads (Morland Road) in Agripada, at rates aggregating Rs. 48,649, including 10 per cent. for contingencies."

No. 5011.

Resolved : "That, as applied for by the Commissioner in his letter No. 11006, dated 28th instant, sanction be given to the acceptance by him of the tender of Messrs. Ruttonji Bezonji & Co., the lowest of the four tenders received for the construction of the Fire Brigade Station at Colaba, at rates aggregating Rs. 25,747-11-1, including 10 per cent. contingencies."

No. 5012.

Considered again letter No. 10504 A, dated 21st instant, from the Commissioner, to the Secretary, regarding the conveyance of troops by tramway, and also the erection of sheds and temporary latrines for troops, &c., on guard in connection with the recent riots.

Read letter No. 11016, dated 29th instant, from the Commissioner, to the Secretary, as under :—

SIR,—In continuation of this Office No. 10504A of the 21st instant, and the Resolution No. 4865 of the Standing Committee, I have the honor to report, for the information of the Standing Committee, that the Bombay Tramway Company have preferred bills for Rs. 858-7-0, which I have ordered to be paid. This amount will be met from the surplus cash balance. A surplus of about 4½ lakhs has accrued since the publication of revised estimates for the year 1892-93, out of which Rs. 66,531-12 have been sanctioned, and a sum of Rs. 32,726-5 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 5013. *Resolved* : " That letter from the Commissioner to the Secretary, No. 11016, dated 29th instant, be *recorded.*

" That the consideration of letter from the Commissioner to the Secretary, No. 10504A, dated 21st instant, be further postponed."

No. 5014. *Resolved* : " That, as applied for by the Commissioner in his letter No. 10385, dated 19th instant, the Committee approve, under section 91 of the Municipal Act, of his applying to Government to acquire, under the Land Acquisition Act, 6,086·66 square yards or thereabouts of ground, the property of Bai Kanbai, widow of Padamsi Danji, as shown in scored red lines on tracing marked ' A,' dated this day, and filed in supplement to Minute Books, such land being required for roads and frontages in the Agripada District."

Considered letter No. 10577, dated 22nd instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to request the sanction of the Standing Committee to the leasing of the pieces of Municipal ground, as per the accompanying list, for the year 1893-94, on the same terms as those sanctioned in the Standing Committee's Resolution No. 11814 of 8th February 1893.

I have also to report for the information of the Standing Committee, with reference to their Resolutions Nos. 12793, dated 17th February 1892, and No. 11814, dated 8th February 1893, that two chowkies—one at Dadar Road and the other at the junction of Dadar and Elphinstone Roads—were not included in the list by the Executive Engineer, but that rent has been charged for the same, and rent for chowkies Nos. 3A, 3, and 6, referred to in the resolutions above quoted, has not been charged as the chowkies stand on Government land.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 10577, dated 22nd instant, to the Secretary from the Commissioner, be *recorded.*

No. 5015.

"2. That sanction be given, under Section 92 (*b*) of the Municipal Act, to the leasing to the Commissioner of Police of the following plots of Municipal ground as sites for Police chowkies at the undermentioned rates on sufference for one year, the chowkies to be removeable at three months' notice :—

No.	Names of Roads.	Rent to be charged for 1893-94.	Remarks.
1	Marine Street, near Town Hall and Custom House	149·44	
2	Chinch Bandar Road, near Elphinstone Overbridge	11·38	
3	Pedder Road	1·77	
4	Pedder Road, near Altamount and Gowalia Tank Road	1·77	
5	DeLisle Road and Haines Road	1·26	
6	Bellasis Road	3·79	
7	Wari Bandar Road and Belvedere Road	1·26	
8	Grant Road, near the Two Tanks	2·13	
9	Falkland Road and Tardeo Road	26·36	
10	Near the junction of Mount Road (Mazagon) and Dockyard Road	14·29	
11	Sankli Street and Haines Road	35·98	
12	Lady Jamsetji Road, Portuguese Church Street, and Dadar Road	1·19	
13	Lady Jamsetji Road	·30	
14	Lady Jamsetji Road, near Mahim Bazaar Cross Road	·59	
15	Custom Road, near the junction of Lady Jamsetji Road	1·48	
16	Cleveland and Worli Roads	4·00	
17	Near the junction of Worli, Fergusson, Haines, and Mahaluxmi Roads	·44	
18	DeLisle Road and Carroll Road	4·26	
19	Near Arthur Road and DeLisle Road	2·20	
20	Dadar Road, opposite Municipal Ward Offices	5·70	These chowkees were not included in the list referred to in the Standing Committee's Resolution No. 12795, dated 17th February 1892. Rent to be charged from 1st April 1891."
21	Junction of Dadar and Elphinstone Roads..	3·18	

Proposed by A. G. Viegas, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

"That the following be *recorded* :—Letter No. 10727, dated 24th instant, from the Commissioner, reporting, with reference to the Committee's Resolution No. 1749, dated 31st May last (sanctioning the purchase of 15 pairs of

bullocks at Rs. 150 each and 15 pairs at Rs. 120 from Messrs. Kursedjee & Sons, Kirkee), that the Health Officer thought it necessary to purchase 19 pairs at Rs. 150 and 11 pairs at Rs. 120. The excess of Rs. 120 will be met out of the grant for the purchase of bullocks, Health Department Budget.

"That in the opinion of the Standing Committee tenders should be called for before the commencement of next year, in order to ascertain whether bullocks cannot be obtained from other dealers."

The motion was *lost*, and it was agreed that the letter be *recorded*.

No. 5017.

Resolved: "That the consideration of the following be postponed, and that the Commissioner be requested to inform the Committee what portions of the work of rendering the Malabar Hill Reservoir watertight have been done, the cost, and what remains to be done:—Letter No. 10856, dated 25th instant, from the Commissioner, forwarding an estimate, amounting to Rs. 40,264, for the work of covering the floors of the vaults under the filters with 1″ of Indian patent stone, and repointing the walls under the vaults up to the springing of the arches with the same material."

Read letter No. 10836, dated 25th instant, from the Commissioner to the Secretary, as under:—

SIR,—I have the honor to report, for the information of the Standing Committee, that some time back a portion of the Colaba foreshore at Wodehouse Bridge, in front of the Warrant Officers' Quarters, was being reclaimed with road scrapings, and as a complaint was received in regard to the nuisance caused therefrom, I deemed it right to stop the work and requested the Executive Engineer to protect the reclamation by erecting a rough ramp to protect the access of the tide and to cover it with sweet earth. This was reported under this Office No. 5 of the 1st April 1893, and the work was performed at a cost of Rs. 1,725; and as the matter was urgent, I directed that the cost be met out of my Discretional Contingent Grant, pending a special sanction to be thereafter obtained. I now request the necessary sanction to the expenditure to be met by a transfer from the surplus cash balance.

A surplus of about 4½ lakhs has accrued since the publication of the Revised Estimates for the year 1892-93. Out of this sum Rs. 66,531-12-0 have already been sanctioned, and the expenditure of Rs. 31,001-5-0 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner, in his letter No. 10836, dated 25th instant, the Corporation be recommended to sanction the payment of Rs. 1,725 from Surplus Cash Balance to meet the cost (1) of erecting a rough ramp to prevent the access of the tide to reclaimed ground on the foreshore at Wodehouse bridge, and (2) of covering the reclamation with sweet earth."

No. 5018.

Read letter No. 10982, dated 28th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to state that the Drainage Engineer reports that the only means by which the Hon'ble Mr. Fazulbhoy Visram can cause the drain of his premises situated at Lal Bagh, Parel, to empty into the Municipal sewer at Arthur Road is by carrying the same through or under the land belonging, or alleged to belong, to Mr. Thakersee Dewjee. Mr. Thakersee Dewjee was requested, under section 230 of the City of Bombay Municipal Act, to state his objections, if he had any. I forward herewith a copy of letter, dated the 21st June 1893, from Messrs. Pavri and Raghunath, in reply, on behalf of Mr. Thakersee Dewjee. This letter was not sent in within the period specified in the notice, but I may add that the alternative proposed therein is not feasible.

Sanction is now required to the construction of the drain under section 230.—I have, &c., H. A. ACWORTH, Commissioner.

No. 296 of 1893.

BOMBAY, 21*st June* 1893.

TO THE COMMISSIONER.

SIR,—In reference to your letter No. 74, dated 6th instant, to the address of Thakersee Dewji, Esq., asking him to state his objections as to why the drain of the Hon'ble Mr. Fazulbhoy Visram should not be carried through our client's property, we beg to state on his behalf as follows :—

1. Our client is surprised to note how the Hon'ble Mr. Fazulbhoy's chawls are allowed to stand by the Municipality, notwithstanding they having been built in contravention to section 348, sub-section D. Our client trusts that the Municipality will take serious notice of his infringement of the law.

2. On the accompanying plan we beg to submit an alternative line in *red* for the proposed drain, which, we believe, will be more convenient than the one proposed by the Hon'ble Mr. Fazulbhoy.

3. Our client proposes to build on the site of the proposed drain soon after the rains, in which case the drain will have to be removed.

In these circumstances, we trust that the Hon'ble Mr. Fazulbhoy does not encroach upon our client's property.—We have, &c., PAVRI AND RAGHUNATH, Architects, &c.

Resolved : "That, as applied for by the Commissioner, in his letter No. 10982, dated 28th instant, the Committee approve of an order in writing being given to the Hon'ble Mr. Fazulbhoy Visram authorising him to lay a drain for his premises at Lal Bagh, and to carry the same into, through or under the land belonging to, or alleged to belong to, Mr. Thakersee Dewji, to the Municipal sewer in Arthur Road."

No. 5019.

Resolved : "That the following be *recorded* :—Memorandum No. 10916, dated 28th instant, from the Commissioner, reporting the fall of the front wall of a house in Dongri Cross Lane, owned by Messrs. Oodhowjee Visram and Bala Visram, on the 20th ultimo, the estimated loss being Rs. 20, the cause of fall being due to the structure being old."

No. 5020.

Resolved : "That the following be forwarded to the Commissioner for favour of remarks :—Memorandum from the Municipal Secretary, forwarding petition, dated 25th instant, addressed to the Corporation by Messrs. S. S. Batliwalla, Manekjee Kaka, Nadershah Manekjee and others, requesting that a private market may be allowed to be built at either Currey or DeLisle Roads."

No. 5021.

The following return was read and *recorded* :—

Return of fires at Agripada Lane and Mangal Wadi (Girgaum), forwarded with the Commissioner's memorandum No. 10560, dated 22nd September 1893.*

No. 5022.

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 27th August 1893.

Resolved: "That, as applied for by the Commissioner, in his letter No. 11080, dated 29th instant, sanction be given to the acceptance by him of the tender of Messrs. Hormusjee Jehangir & Co., the lowest of the six tenders received for the construction of storm-water drains and new road (Gilder Street) in Agripada, at rates aggregating Rs. 89,621-15-3, including 10 per cent. for contingencies."

No. 5023.

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* *See* Appendix C. † *See* Appendix B.

Resolved: "That the following be *recorded* :—Letter No. 11168, dated this day, from the Commissioner, reporting that he has accepted the tender of Messrs. Ramchunder Daji & Co., the lower of the two tenders received for the construction of a road across Khandia Tank in extension of Khandia Street, at rates aggregating Rs. 2,388-2-10."

No. 5024.

Resolved : "That, as applied for by the Commissioner, in his letter No. 11212, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Behramji Jehangir, Tejoo Kaya & Co., lowest of the four tenders received, for the work of paving footpaths, laying water tables, kerbstones, &c., in different parts of the city, at rates aggregating Rs. 18,057-13-5."

No. 5025.

BOMBAY, 6*th September* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 30th ultimo, were signed.

The seal of the Corporation was affixed to deed of agreement between Mr. Edulji Bomanji Morris and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property at No. 3, Wodehouse Road, Colaba, without payment of any compensation in respect of the unauthorised work, indicated on the plan annexed to the deed, and at the rate of Rs. 10 per square yard, for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition.

No. 5148.

The seal was also affixed (1) to 2 attested duplicate debentures of the Municipal Loan of 1878, Nos. 2537 and 3953, of Rs. 500 each ; (2) to 23 attested duplicate debentures of the Tansa Water Works Loan, No. 3378, of Rs. 500, Nos. 1001-2 to 1037-38 and 1045-46, of Rs. 1,000

each, Nos. 11461-70 and 11501-10, of Rs. 5,000 each ; and (3) to 2 attested duplicate debentures of the Sanitary Works Loan of 1885, Nos. 39 NN and 40 NN, of Rs. 500 each.

No. 5149. *Resolved* : "That, as applied for by the Commissioner, in his memoranda Nos. 11449, 11470 and 11471, dated 2nd instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Goverdhandass Purmandas...	Building at Narayen Dabulkar Road.
„ Allibhoy Bhaijibhoy ...	Do. at Ripon Road.
Bai Gomtibai, widow of Mr. Shamji Ladha.	Do. at No. 214, Chinch Bunder Road."

No. 5150. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 11700, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 5151. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 11224, dated 30th ultimo, and under the Pension Regulations, sanction be given to the payment of a monthly pension of Rs. 50, from 25th May last, to Mr. Samuel Reubin, Inspector, Engineer's Department. The amount to be met, from the grant for pensions and gratuities, current year's Budget.

"That sanction be also given to the payment of Mr. Reubin's salary, from 15th to 24th May last, both days inclusive, at Rs. 150 per month."

No. 5152. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 11301, dated 31st ultimo, sanction be given, under the terms of section 69 (e) of the Municipal Act, to a variation of the contract with Messrs. Richardson & Cruddas, contractors for providing fire-service, water-supply, &c., to the new Municipal Offices, so as to allow of the payment of Rs. 4,000 to them, pending the granting of the final certificate."

No. 5153. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 11430, dated 1st instant, sanction be given, under the terms of sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. Dadabhoy Cursetjee Bhandupwalla, for the recovery of Rs. 14, being the amount of wheel-tax bill for the quarter ending 31st December 1887 and notice fee."

Resolved : " That the following be *recorded* :—Memo-
No. 5154. randum No. 4585, dated 5th June last, on the subject of the cleaning of the well at No. 102, Jairajbhoy Street, the property of Mr. Noor Mahomed Jairajbhoy Peerbhoy. Letter No. 11097, dated 29th ultimo, from the Commissioner, reporting that the owner of the well has now carried out the work required of him by the Municipality."

Resolved : " That the following be printed and circulated
No. 5155. and brought on for consideration hereafter :—Memorandum No. 11292, dated 31st ultimo, from the Commissioner, forwarding, with reference to the resolution of the late Town Council, No. 1444, dated 22nd December 1886, letter No. 1929, dated 29th ultimo, from the Chief Accountant enclosing 12 statements, marked A to L, showing the estimated cost of each loan work and expenditure on different loans, &c., up to 31st March 1893."

Resolved : " That the following be forwarded to the
No. 5156. Commissioner for favor of remarks:—Memorandum from the Municipal Secretary, forwarding petition, dated 31st ultimo, addressed to the Corporation by Hormusji Navroji, Bejanji Jamsetji,. and Nusserwanji Ruttonji, victoria-drivers, on the subject of water connections to their stables at Chandanwady."

Resolved : " That the following be forwarded to the
No. 5157. Commissioner for favour of remarks :—Memorandum from the Municipal Secretary, forwarding petition, addressed to the Corporation, dated 25th ultimo, by Messrs. Sorabji Edulji Ginwalla, Hormasji Framji Oodwaree and others, complaining of the alleged nuisance caused by the open gutter near the Merwanji Framji Panday's Dharamsalla at Karelwadi."

It was agreed that the consideration of letter No. 11591, dated 5th instant, from the Commissioner, forwarding application from Mr. P. C. Higgins, late Superintendent of Markets, requesting a reconsideration of his case, be postponed till next week.

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 3rd September 1893.

* *See* Appendix **B**.

Resolved : "That the following be *recorded* :—Letter No. 11593, dated 5th instant, from the Commissioner, reporting that he has sanctioned the purchase of a road-scarifying machine for Rs. 3,640, from Messrs. Richardson & Cruddas, for road repair purposes. The cost to be met out of the grant for stores and contingencies, section IV, Engineer's budget, current year.

No. 5158.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, inasmuch as the machine is a special one and not such as can be purchased in the ordinary local market."

Resolved : "That, as applied for by the Commissioner, in his letter No. 11552, dated 2nd instant, sanction be given to the continuance, up to the 13th idem, of the temporary appointments of two draftsmen on Rs. 30 each per mensem, sanctioned in the resolution of the Committee, No. 2198, dated 7th June last. The amount to be met out of savings in the grant under section II, inspecting manholes and sewers and cleaning miscellaneous drains and gutters, current year's budget."

No. 5159.

Read letter No. 11528, dated 2nd instant, from the Commissioner, to the Secretary, as under :—

SIR,—In continuation of this office No. 11016 of the 28th ultimo, I have the honor to report, for the information of the Standing Committee, that the Bombay Tramway Company have preferred further bills for tramway charges amounting to Rs. 147-3-6. This completes the bills for tramway charges. I have ordered the amount to be paid. This amount will be met from the surplus cash balance.

A surplus of about 4½ lakhs has accrued since the publication of revised estimates for the year 1892-93, out of which Rs. 66,531-12-0 have been sanctioned and a sum of Rs. 33,584-12-0 has been recommended for sanction.—I have, &c. H. A. ACWORTH, Commissioner.

Resolved: "That the following be *recorded* :—Letter No. 11528, dated 2nd instant, from the Commissioner, reporting that the Tramway Company have preferred further bills amounting to Rs. 147-3-6, for the conveyance of troops and others during the recent riots, and that the amount has been ordered to be paid out of surplus cash balance."

No. 5160.

Considered the following :—

No. 17134 OF 1893-94.

BOMBAY, 31*st August* 1893.

To THE COMMISSIONER.

SIR,—I have the honour to forward the following results of examination of the Tulsi, Vehar and Tansa waters for submission to the Standing Committee :—

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir, on the 22nd August 1893.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·11

Sample of filtered Tulsi water obtained from the distributing basin, Malabar Hill Reservoir, on the 22nd August 1893.

	Parts per million.
Free Ammonia	·05
Albuminoid Ammonia	·08

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 22nd August 1893.

	Parts per million.
Free Ammonia	·02
Albuminoid Ammonia	·05

Sample of filtered Vehar water obtained from the Vehar filters on the 23rd August 1893.

	Parts per million.
Free Ammonia	·04
Albuminoid Ammonia	·05

Sample of Tansa water drawn from the fire plug on the 27" main, Arthur Road, on the 21st August 1893.

	Parts per million.
Free Ammonia	·04
Albuminoid Ammonia	·05

I have, &c.,—T. S. WEIR, Health Officer.

No. 11531, dated 2*nd September* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner,

No. 5161. *Resolved* : "That memorandum No. 11531, dated 2nd instant, from the Commissioner, be *recorded*."

No. 5162. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 11728, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Mistri, Bhedwar, Vachaghandy & Co., the lowest of the five tenders received, for the construction of a storm-water drain and a new road in Agripada district, north of Byculla Club (Club Road) at schedule rates aggregating Rs. 48,500-8-11, including 10 per cent. for establishment and contingencies."

BOMBAY, 13*th September* 1893.

AT the meeting of the Standing Committee held this day, there were present:—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 6th instant were signed.

No. 5523. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 12019 and 12020, dated 9th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Bhasker Shewram	Building at No. 14, 1st Pathan Street.
„ Bomanjee Eduljee Kassinath...	Do. at Parsee Bazar Street."

No. 5524. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 12254, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

The consideration of the following was postponed till next week:—Letter No. 11591, dated 5th instant, from the Commissioner, forwarding application from Mr. P. C. Higgins, requesting a reconsideration of his case.

At the request of the Commissioner, priority was given to the following :—

No. $\frac{A}{11437}$ OF 1893-94.

BOMBAY, 1*st September* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—I have the honor to apply for sanction to address Government with a view to raising a loan of 33½ lakhs.

2. The Corporation have from time to time sanctioned expenditure amounting to Rs. 16,65,523 on different works to be paid for out of a loan to be subsequently raised, the expenditure in the meantime being sanctioned against available balances. The Corporation have also undertaken liabilities amounting to Rs. 1,54,652

on account of similar works—that is, Capital Works, no sanction for actual expenditure on which has yet been applied for. The details are as follows :—

A

——	Amount.	REMARKS.
Drainage Work.	Rs.	
Love Grove Pumping Station ...	4,60,948	Corporation Resolution No. 6435 of 8-9-91.
		Do. 7369 of 13-10-92.
		Do. 3694 of 17- 7-93.
Colaba Sewerage	7,09,608	Do. 13403 of 9- 3-93.
Storm-water drains	24,519	Do. 1530 of 15- 5-93.
Do. in Morland Road, &c.	1,80,204	Do. 3002 of 26- 6-93.
Water Works.		
Works at Bhandarwada Reservoir	1,15,500	Do. 11358 of 14- 1-92.
Extension of Water Mains ...	30,000	Do. 214 of 6- 4-93.
Miscellaneous.		
Health Department stables in F and G Wards...	78,744	Do. 12246 of 16- 2-93.
Bigaris' Chals, Bori Bunder ...	66,000	Do. do.

B

Roads.	Rs.
Wari Bunder Bridge	1,32,652
Falkland Road Bridge	22,000

These works comprise a total liability of Rs. 18,20,175. But in addition to the above, a large loan expenditure was included in the budget passed by the Corporation.

C

	Rs.
Drainage.	
Sewerage of Mazagon	4,91,248
Do. Parel	3,11,488
Do. Umarkhari	3,08,327
Branch sewers to Parel Road	75,959
Miscellaneous Extensions and Improvements	36,871
Water Works.	
New Distribution Mains	16,00,000
Road from Vehar to Tulsi	25,000
Improvements, Malabar Hill Reservoir	75,000
Miscellaneous.	
Milch Cattle Stables, Mody Bay	20,631
Halalkhors' Chawls, F & G Wards	33,111
Bullock stables, Girgaum Night-soil Depôt	26,642
Purchase of land on Flats	1,50,000
Total Rs. ...	31,54,277
Grand Total Rs. ...	49,74,452
Say Rs. ...	50 lakhs.

3. The following sums are proposed for expenditure in the following years :—

	1893-94.	1894-95.	1895-96.
Statement A.	Rs.	Rs.	Rs.
Love Grove Pumping Station	4,60,948	.....	.....
Colaba Sewerage	3,50,000	3,59,608	.....
Storm-water drains	20,000	4,519	.....
Storm-water drains in Morland Road, &c. ...	60,000	1,20,204	.....
Works at Bhandarwada Reservoir	.....	65,500	50,000
Extension of water mains	20,000	10,000	.....
Health Department Stables, F and G wards ...	20,000	58,744	.....
Bigaris' Chawls, Bori Bunder	20,000	46,000	.....
Statement B.			
Wari Bunder Bridge	37,000	95,652	.....
Falkland Road Bridge	22,000	.....	.....
Statement C.			
Sewerage of Mazagon, including Kamatipura Bazar Street sewer	.....	2,63,000	2,62,575
Sewerage of Parel	.....	1,60,000	1,51,488
Sewerage of Umarkhari with Kavasji Patel Tank Road sewer	87,490	1,74,980	87,489
Miscellaneous extensions and improvements of drains	30,000	6,871	.....
Improvements at Malabar Hill Reservoir ...	50,000	5,000	20,000
Road from Vebar to Tulsi	.....	25,000	.....
Halalkhors' Chawls, F and G wards	.....	33,111	.....
Bullock Stables, Girgaum Night-soil Depôt ...	.....	26,642	.....
Purchase of land on Flats	1,50,000	.....	.....
	13,27,438	14,54,831	5,71,552
Total Rs... ...		33,53,821	

The total loan required to meet the cost of the works above specified is thus Rs. 33,53,821, or say 33½ lakhs, and I would propose that it be raised in three instalments :

(1) 13 lakhs before 31st January 1894.
(2) 14½ lakhs between 1st July and 31st December 1894.
(3) 6 lakhs between 1st July and 31st December 1895.

4. No explanation is necessary from me with regard to the works comprised in statements A and B costing Rs. 18,20,175, for they have all received the separate sanction of the Corporation. Nor do I think the list in statement C (last para.) proposed to be included requires much explanation. The need for the works of drainage and sewerage which are comprised in it has been repeatedly recognized, and I do not suppose that any doubt is entertained on the subject of their being proceeded with. At the same time I must inform the Corporation that the estimates on which the above figures relating to the sewerage of the Mazagon, Parel, and Umarkhari districts are based are those which were taken out in 1889 and which are now being revised, and I cannot guarantee their accuracy, except perhaps in the case of Umarkhari. But this application for a loan can no longer be postponed, and it is admitted on all hands that the sewerage of the districts referred to ought not to be delayed a moment longer than can be avoided. I have there-

fore no alternative but to submit the best figures I can, and if it should turn out that they are below the truth, a supplementary grant will have to be included in a separate application, which may perhaps raise the instalment to be issued to the public in 1894.

The improvements in the Malabar Hill Reservoir, with regard to which I recently presented a report and estimate to the Standing Committee, consist in completing the work of leakage prevention by treating the distributing basin and the vaults under the filters so as to render them watertight. I regret that I am unable to include the estimate for the additional filtering area, which is so much required there, but the Engineers and myself have not yet been able to arrive at any definite conclusion, though we expect to do so in the course of two months or less. The chawl for halalkhors in F and G wards and the bullock stable at the Girgaum Night-soil Depôt have long been required and pressed for by the Health Officer, and the land which it is proposed to purchase on the Flats is needed for the deposit of town sweepings.

5. The Corporation will observe that I have not included the sums of Rs. 16,00,000 for new distribution mains and Rs. 20,631 for milch cattle stables in Mody Bay. With regard to the latter item, I have been unable to satisfy myself or the Corporation either that stables of the size required can be raised for such a sum or that they can be worked so as to give a fair return on the capital. With regard to the former, I have had serious doubts as to what recommendation it would be best to make, as, whatever may be thought of the main features of the scheme, there are portions of it which are generally admitted to be necessary. But as a Committee is sitting on the subject, which certainly will not report in time for me to include any sum which it may recommend in this application, I have thought it best on all accounts to leave this matter for settlement at some future time.

6. The uncertainty which besets the figures shown against the items "Sewerage in Mazagon, Parel, and Umarkhari" renders it, I think, expedient to lump these three items together under the head "Sewerage of Umarkhari and elsewhere." This will enable us to use the sums raised as far as they will go, and the further drainage loan, which is inevitable in the future, will include, without special reference, any extra amount which may, and probably will, be required in Mazagon and Parel as well as what will be required in other districts.

7. The loan should be issued at 4 per cent. for 40 years, and I have now to request sanction to being allowed to address Government on the subject. There is no time to be lost, and I have no doubt the Corporation will consent to take this matter up independently of the regular agenda either as urgent business at an ordinary meeting or at a special meeting.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by the Hon'ble Mr. Fazulbhoy Visram, seconded by E. B. Carroll, Esq.—

"That, as applied for by the Commissioner, in his letter No. $\frac{A}{11437}$ dated 1st instant, the Corporation be recom-

mended to sanction an application being made to Government for authority to the raising of a loan of Rs. 33½ lakhs at 4 per cent. repayable in 40 years for drainage and other works. The loan to be raised in three instalments as under:—

(1) 13 lakhs before 31st January 1894;

(2) 14½ lakhs between 1st July and 31st December 1894;

(3) 6 lakhs between 1st July and 31st December 1895; provision for the payment of interest on the first instalment having been made in the current year's budget."

Amendment, moved by the Hon'ble Mr. Javerilal U. Yajnik, seconded by A. G. Viegas, Esq.—

"That the items of the sewerage of Mazagon, including Kamathipura Bazaar Street sewer, and of the sewerage of Parel, contained in para. 3 of the Commissioner's letter to the Secretary, No. $\frac{A}{11437}$, be expunged, as the final estimates regarding those works are not available as yet.

"That the Corporation be recommended to sanction the raising of a loan of Rs. 25,25,000."

The *amendment* was *carried* as a substantive proposition as follows:—

"That, with reference to the Commissioner's letter to the Secretary, No. $\frac{A}{11437}$, dated 1st instant, the Corporation be recommended to sanction an application being made to Government for authority to the raising of a loan of Rs. 25,25,000 at 4 per cent, repayable in 40 years, for drainage and other works as per margin. The loan to be raised in three instalments as under:—13 lakhs before 31st January 1894, 10 lakhs between 1st July and 31st December 1894, 2¼ lakhs between 1st July and 31st December 1895.

No. 5525.

	1893-94.	1894-95.	1895-96.
Statement A.	Rs.	Rs.	Rs.
Love Grove Pumping Station ..	4,60,948	....	....
Colaba Sewerage	3,50,000	3,59,608	....
Storm-water drains	20,000	4,519	....
Storm-water drains in Morland Road, &c.	60,000	1,20,204	.....
Works at Bhandarwada Reservoir..	....	65,500	50,000
Extension of water mains	20,000	10,000	.. ..
Health Department Stables, F and G Wards	20,000	58,744	.....
Bigaris' Chawls, Bori Bunder ..	20,000	46,000	.....
Statement B.			
Wari Bunder Bridge	37,000	95,652	.....
Falkland Road Bridge..	22,000	....	....
Statement C.			
Sewerage of Umarkhadi with Kavasjee Patel Tank Road sewer.. ..	87,490	1,74,980	87,489
Miscellaneous extensions and improvements of drains	30,000	6,871	.....
Improvements at Malabar Hill Reservoir	50,000	5,000	20,000
Road from Vehar to Tulsi	....	25,000	.. ..
Hajalkhors' Chawls, F and G Wards	....	33,111	....
Bullock stables, Girgam Night-soil Depôt	....	26,642	.....
Purchase of land on Flats	1,50,000	....	....
	13,27,438	10,31,831	1,57,489

Total Rs. 25,16,758, or say Rs. 25,25,000

"That the items for the sewerage of Mazagon, including KamathipuraBazaar

Street sewer, and for the sewerage of Parel, be expunged from the list, as final estimates regarding those works are not available as yet."

Resolved: "That the consideration of the following be postponed till next week :—Memorandum No. 11292, dated 31st ultimo, from the Commissioner, forwarding, with reference to the resolution of the late Town Council, No. 1444, dated 22nd December 1886, letter No. 1929, dated 29th ultimo, from the Chief Accountant, enclosing 12 statements, marked A to L, showing the estimated cost of each loan work and expenditure on different loans, &c., up to 31st March 1893.

No. 5526.

Considered letter No. 11799, dated 7th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to the resolution No. 4865 of the 23rd ultimo of the Standing Committee, I have the honour to report, for the information of the Standing Committee, that the expenditure of Rs. 2,787 has been incurred for the erection of sheds and for the rent of tarpaulins which has been hired from bazaar. I have directed that the expenditure be met out of the surplus cash balance.

A surplus of about 4½ lakhs has accrued since the publication of the revised estimates for the year 1892-93, out of which Rs. 66,531-12-0 have been sanctioned and a sum of Rs. 33,731-15-6 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, with reference to his letters as per margin, the Commissioner be referred to resolution No. 5499 passed by the Corporation on the 11th instant."

No. 5527.

Letter No. 10504-A, dated 21st ultimo, from the Commissioner, on the subject of the erection of sheds, &c., for the shelter of troops during the riots.

Letter No. 11799, dated 7th instant, from the Commissioner, reporting that an expenditure of Rs. 2,787 has been incurred for the erection of the sheds and for the rent of tarpaulins which were hired from the bazaar, and that he has directed that the amount be met out of surplus cash balance.

Resolved : "That, as applied for by the Commissioner in his letter No. 11530, dated 2nd instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract of Messrs. Bhedwar & Co., for the construction of Connaught and Sussex Roads, whereby the contract period shall be further extended from 23rd July to 8th August 1893."

No. 5528.

Read letter No. 12024, dated 11th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to forward a report and tracing from the Executive Engineer relating to Bora Musjid Lane, which is a cross road between Hornby Road and Bora Bazaar Street. The

improvement line of the lane is shown, and it will be observed that at the east end it bends round large houses marked A, B, and C. The house B and C has been pulled down, and I concur with Mr. Murzban in considering this an excellent opportunity, and one not to be lost for continuing the road in a straight line and with a width of 25 feet through into Bora Bazaar Street. The frontages marked B and C will be available for resale. They measure about 542 sq. yds. collectively, and when the road is made they will be much more valuable than they are at present. Mr. Murzban estimates that the purchase may be made for Rs. 25,300, and I hope he is correct. We shall have to proceed under the Land Acquisition Act, because the number of owners is considerable and there is no reasonable likelihood of our coming to terms with them all. I cannot of course say for certain whether the Collector's award may not exceed the sum estimated, but I think it cannot do so largely, and I would suggest that the Standing Committee should move the Corporation to authorise the Commissioner to acquire the land on the best terms possible. I would also request that in any orders that may be passed, authority may be given to me to resell the frontage marked C and either to resell the frontage B or to reserve it for Municipal uses. The situation is very central, and Mr. Murzban is inclined to think it may be more in our interest to reserve it for a Ward Office and metal depôt than to sell it. At all events the point is deserving of consideration, and I would request that it may be left open.

The sum to be paid should, I think, come out of revenue like an ordinary street improvement and be met out of surplus cash balance. The surplus of 4½ lakhs, which has been so often referred to, has, since the closing of the accounts for 1892-93, been ascertained to be Rs. 7¾ lakhs, and out of this last sum there remains an unexpended and unallocated balance of Rs. 6,71,949-4-6. I see that there is a notice of motion relating to this very subject on this month's agenda of the Corporation, and if the Standing Committee dispose of the question promptly it might be brought on at the same time as that notice.—I have, &c., H. A. ACWORTH, Commissioner.

No. 7810 OF 1893-94.

BOMBAY, *7th September* 1893.

TO THE COMMISSIONER.

SIR,—I have the honor to report that the house in Bora Bazar Street, belonging to the family of the late Mr. Jejeebhoy Dadabhoy, and shown by yellow tint in the accompanying tracing, having been pulled down an excellent opportunity has offered itself to improve and extend the street known as Bora Musjid Lane. This lane is one of the cross streets which connect Hornby Road with the interior of the Fort.

In the tracing the regular line of the street is shown in red. It will be perceived that this line passes through a house marked A; this is a substantial house, four stories high, and it will not be possible

to complete the improvement of the above-mentioned lane until this property either falls down or is purchased at a high price—a very remote contingency.

The late Mr. Jejeebhoy Dadabhoy's house having been pulled down, I propose that the whole of the property should be acquired and the line of the lane continued through it as shown in blue. After the road is made through the property, the frontages B and C, measuring 113·86 and 428·84 square yards respectively, could be disposed of.

I estimate the value of Mr. Jejeebhoy Dadabhoy's property, measuring about 977 square yards, at Rs. 22,000, to which must be added 15 per cent. for compulsory acquisition, or in all Rs. 25,300.

I expect that, after the road is made, the frontages, measuring about 542 square yards, would fetch about Rs. 25 or Rs. 30 per square yard.

I am informed that Mr. Jejeebhoy Dadabhoy's property is in the possession of several members of the family, and it would not be possible to obtain it by private negotiations. It will be necessary, therefore, to acquire it under the Land Acquisition Act. If you approve of the above proposal, the sanction of the Corporation may be obtained to it.—I have, &c., M. C. MURZBAN, Executive Engineer.

Resolved: "That, as applied for by the Commissioner in his letter No. 12024, dated 11th instant, and with a view of improving Bora Musjid Lane, the Corporation be recommended (1) to sanction the acquisition of 977 square yards or thereabout of land belonging to the family of the late Mr. Jijibhoy Dadabhoy in Bora Bazaar Street, shown in yellow colour and marked B and C on the tracing accompanying the letter; (2) to authorise the Commissioner to acquire the land on the best terms possible, and to resell the frontage marked C, and either to resell or reserve for Municipal use the frontage marked B on the same tracing; (3) to sanction the estimated cost, Rs. 25,300 or thereabout, including 15 per cent. for compulsory acquisition, being met from surplus cash balance.

No. 5529.

"That, subject to the sanction of the Corporation being accorded to the acquisition of this land, sanction be given, under section 91 of the Municipal Act, to the Commissioner's applying to Government to acquire the same under the Land Acquisition Act, as there appears to be no reasonable likelihood of the ground being obtained by private negotiations."

Resolved: "That, as applied for by the Commissioner in his letter No. 12022, dated 11th instant, sanction be given to the purchase by him from

No. 5530.

Messrs. Killick, Nixon & Co. of 300 tons of Powell's Duffryn Cardiff coal at Rs. 18-10-0 per ton deliverable at Love Grove.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as similar arrangements sanctioned by the Committee's resolutions Nos. 9755, dated 7th January 1891, and Nos. 921, 1453, 4271, 9917, 12866 of 1892-93, and No. 4030 of 26th July 1893, have been advantageous to the Municipality."

Read letter No. 12023, dated 11th instant, from the Commissioner to the Secretary, as under :—

SIR,—In pursuance of the instructions conveyed in Standing Committee's resolution No. 6531 of 21st September 1892, I have the honour to forward two designs and estimates for an arch with the necessary inscriptions at Tansa. The latter amount respectively to Rs. 2,628 and Rs. 4,245. The Corporation have already sanctioned Rs. 2,000 for the work and the excess can in either case be met from the general contingencies included in the final revised estimate of the cost of the Tansa Works sanctioned in Corporation's resolution No. 12693 of 23rd February 1893. If the design is approved, I recommend the execution of the cheaper work, which is also Mr. Murzban's opinion. The arch will span the east end of the dam. I have pointed out to Mr. Murzban that what the Corporation actually asked for was an obelisk or column, but as he has prepared this design for an arch, as it will be much more ornamental than an obelisk or column, as the excess of Rs. 628 is very small, and as it can be provided for, I think it had better be considered.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by Kaikhosru N. Kabraji, Esq., seconded by Harkisondas Narrotumdas, Esq.—

"That letter No. 12023, dated 11th instant, and its accompaniments, from the Commissioner, regarding the erection of a memorial at Tansa, be forwarded to the Corporation, with reference to their resolution No. 6472, dated 15th September 1892, and with the recommendation that sanction be given to the erection of the archway shown on the tracing marked A, instead of an obelisk or column, and at a cost of Rs 2,628. That, as the Corporation by their resolution No. 12693, dated 23rd February last, only sanctioned Rs. 2,000 for the memorial they be recommended to sanction the additional outlay of Rs. 628 to the debit of the grant for contingencies included in the final revised estimates for Tansa Water Works."

No. 5531.

Amendment, proposed by Bhalchandra K. Bhatawadeker, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

"That the Commissioner be requested to report whether the work cannot be carried out within the sanctioned amount."

On a division, the *amendment* was *lost*, the votes being 3 *for* and 5 *against*.

There were 5 votes *for* and 5 votes *against* the original motion, which was *carried* by the casting vote of the Chairman.

No. 5532. *Resolved* : " That the following be referred to the Commissioner for favour of report :—Memorandum from the Municipal Secretary, forwarding letter addressed to the Corporation, dated 8th instant, from the Chairman and Agents, Piru Mahomed Mill, on the subject of the cost of constructing the Tulsi pipe road from Haines Road to the mill premises."

No. 5533. *Resolved* : " That the following be forwarded to the Commissioner for favor of report and that the applicant be informed accordingly :—Letter from Mr. Pestonji Edulji Shroff on the subject of the assessment of his property No. 3244, Charniwadi."

No. 5534. *Resolved* : " That the following be printed and circulated and brought on for consideration next week :—Memorandum No. 12013, dated 9th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 2668, dated 21st June last, as to the cause, &c., of the constant failures of the sea-face of the Walkeshwar Road at the foot of Malabar Hill."

The following statement * was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 10th September 1893.

No. 5535. *Resolved* : " That the following be *recorded* :—Memorandum No. 12132, dated 12th instant, from the Commissioner, reporting that 4 per cent. Government paper for Rs. 1,00,000 belonging to the surplus cash deposit account was sold on the 7th idem at Rs. $104\frac{15}{16}$ against the following cost prices:—Rs. 86,000 at Rs. $100\frac{9}{16}$ per cent.; and Rs. 14,000 at Rs. $99\frac{1}{2}$ per cent."

Read letter No. 12107, dated 11th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to Standing Committee's resolution No. 13218 of 8th March 1893, and Corporation resolution No. 209 of 6th April 1893, I have the honour to report for the information of the Standing Committee and Corporation that Messrs. Walsh,

* *See* Appendix B.

Lovett, Mitchell & Co. have agreed to accept the sum of Rs. 11,000 in full satisfaction of all their claims and I have directed payment accordingly.—I have, &c., H. A. ACWORTH, Commissioner.

No. 5536. *Resolved*: "That letter No. 12107, dated 11th instant, from the Commissioner, be forwarded for the information of the Corporation with reference to their resolution No. 209, dated 6th April 1893."

No. 5537. *Resolved*: "That, as applied for by the Commissioner in his letter No. 12206, dated 12th instant, the Corporation be recommended to sanction the payment, from surplus cash balance, of Rs. 373-4-6, being the amount of acting allowance as Foreman Fitter, Municipal Workshops, from 26th October 1891 to 6th May 1893, due to Mr. Cardoz, now an Engineer in the Fire Brigade."

No. 5538. *Resolved*: "That, as applied for by the Commissioner in his letter No. 12193, dated 12th instant, and under the Pension Regulations, sanction be given to the payment of compassionate allowance amounting to Rs. 542-4-2 to Bai Bachubai, widow of the late Mr. Dinsha Rustamji, Ward Clerk, Assessment Department, being the amount payable to her under the regulations.

"The amount to be met from the current year's budget grant for pensions and gratuities."

No. 5539. *Resolved*: "That, as applied for by the Commissioner in his letter No. 12110, dated 11th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract of Messrs. Mistri, Bhedwar, Vachagandi & Co. for the construction of a manual Fire Engine station at Mahim whereby the contract time shall be extended for a month from the 31st ultimo."

No. 5540. *Resolved*: "That letter No. 12216, dated this day, from the Commissioner to the Secretary, on the subject of the sewerage of the Umarkhari Drainage District, be printed and circulated and brought on for consideration next week."

BOMBAY, 20*th September* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E.B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSHRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 13th instant were signed.

Resolved : " That sanction be given to a contract being entered into with Garlick's Indian Patent Stone Company for repairing wall and arches of the distributing basin of Bhandarwada Reservoir with Indian patent stone at schedule rates aggregating Rs. 7,290, including 10 per cent. contingencies.

No. 5766.

"That, under the terms of section 72 (3) of the Municipal Act, the Standing Committee dispense with the invitation for tenders which would otherwise be necessary, as the Company is specially engaged in the manufacture of the patent stone."

The seal of the Corporation was affixed to the contract.

Resolved : " That, as applied for by the Commissioner in his memorandum No. 12541, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 5767.

Proposed by G. W. Roughton, Esq., seconded by Grattan Geary, Esq.—

" That with reference to the Standing Committee's resolution No. 3499, dated 12th July last, sanctioning a monthly payment of Rs. 300 per mensem to Mr. P. C. Higgins, late Superintendent of Markets, and letter No. 11591 of the 5th instant, from the Commissioner, sanction be now given, under the terms of No. 15 (*d*) of the Municipal Pension Regulations, to the grant of a special good service pension to Mr. Higgins at the rate of Rs. 50 per mensem from 27th June last, in addition to the ordinary pension of Rs. 300 originally sanctioned."

No. 5768.

Carried by 6 votes *against* 5.

Considered the following :—

No. 1929 OF 1893.

To THE COMMISSIONER.

BOMBAY, 29*th August* 1893.

SIR,—With reference to the then Town Council's Resolution No. 1444, dated 22nd December 1886, I have the honour to forward herewith twelve statements, marked A to L, which embody all the information required in the above resolution.—I have, &c.,

SORABJI NAVAROJI COOPER,
Chief Accountant.

No. 11292 OF 31ST AUGUST 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH,
Commissioner.

A

Works sanctioned out of

Nature of Loan Works.	Revised Estimated cost of each work.	Amount of Loan sanctioned.	Amount of Loan actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Main Sewer	4,94,272 0 0		
Pipe Sewer	3,75,536 0 0		
Outfall Sewer	2,56,585 0 0		
New Pumping Station One pair of engines	1,91,741 0 0		
Establishment Contingencies	3,81,866 0 0		
	17,00,000 0 0	17,00,000 0 0	16,94,000 0 0
Kamathipura Works	.....	.....	.....
Clerke Road Sewer	.....	.....	.....
	17,00,000 0 0	17,00,000 0 0	16,94,000 0 0
Less—Transferred to Bhandarwada Loan as per Municipal Commissioner's No. 7617 of 14th September 1887 adopted by the Town Council and Corporation	31,209 0 0	31,209 0 0	31,209 0 0
	16,68,791 0 0	16,68,791 0 0	16,62,791 0 0
Bhandarwada Water Works	10,00,000 0 0	10,00,000 0 0	10,00,000 0 0
Add—Amount transferred from 17 Lakhs Loan	31,209 0 0	31,209 0 0	31,209 0 0
	10,31,209 0 0	10,31,209 0 0	10,31,209 0 0
Total ... Rs.	27,00,000 0 0	27,00,000 0 0	26,94,000 0 0
Less—Savings on the Bhandarwada Water Works Loan transferred to meet the cost of other works as sanctioned in the Corporation's Resolution No. 11858, dated 14th January 1892.....			14,878 2 9
		Rupees ...	26,79,621 13 8

* Excess sanctioned to be met out of savings in the other items, *vide* Municipal Commissioner's as per the then Town Council's Proceedings, dated the 27th idem.

the 27 Lakhs Loan.

Date of Repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	.....	4,92,691 8 2	4,92,691 8 2	.....	.....	.....
	.....	2,77,267 13 4	2,77,267 13 4	.....	32,476 12 3	32,476 12 3
	.....	2,55,766 10 0	2,55,766 10 0	.....	.....	.....
	..... *	98,289 9 6	98,289 9 6	.....	.....	.....
		95,742 3 9	95,742 3 9	.....	.....	.....
	1,45,000 0 0	.....	1,45,000 0 0	.....	.....	.....
	.....	1,48,482 5 10	1,48,482 5 10	.....	1,343 6 9	1,343 6 9
	1,45,000 0 0	13,68,240 2 7	15,13,240 2 7	.....	33,820 3 0	33,820 3 0
	.....	76,471 4 6	76,471 4 6	.....	.....	.....
	.....	39,259 5 11	39,259 5 11	.....	.....	.....
1st January 1919.	1,45,000 0 0	14,83,970 13 0	16,28,970 13 0	.....	33,820 3 0	33,820 3 0
	.....	.....	.....	.....	.....	.....
	1,45,000 0 0	14,83,970 13 0	16,28,970 13 0	.....	33,820 3 0	33,820 3 0
	29,035 7 6	9,87,794 5 9	10,16,830 13 3	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	29,035 7 6	9,87,794 5 9	10,16,830 13 3	.....	.....	.....
	1,74,035 7 6	24,71,765 2 9	26,45,801 10 8	.....	33,820 3 0	33,820 3 0

No. 12338, dated 20th February 1884, regarding the disposal of the 17 Lakhs Drainage Loan adopted

B.

Works sanctioned out of the

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
SURFACE DRAINAGE WORKS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Widening Love Grove Sluices	1,61,362 15 4		
Culvert, &c., under B. B. & C. I. Railway near Bellasis Road ..	1,791 0 8		
Khetwadi survey	6,848 0 0		
Raising level of Khetwadi roads	27,017 0 0	A.	
Raising private compounds in Khetwadi	38,580 0 0		
Three branch drains in Khetwadi and storm-water entrances.	27,544 8 0		
Intercepting drain, Tardeo District, and storm-water entrances.	2,80,753 0 0	B.	
Enlarging old open main drain	1,06,091 0 0		
Intercepting drain from Pydhoni to Bellasis Road and storm-water entrances	3,39,516 8 0		
Making connection between low-level sewer and new main sewer	3,100 0 0		
Laying a new 24" main and removing old 24" Tulsi main and filling up the Haines Road entrance	32,688 0 0	C.	
Constructing storage reservoir on the Flats and raising level of manholes in sewers	1,98,840 0 0		
Establishment	1,34,163 0 0		
Contingencies	53,705 0 0		
Cost of land acquired from the Gordon Mill Company in connection with the formation of the storm-water reservoir ...	*6,235 8 11		
	14,18,235 8 11		
Extra petty works executed out of savings in S. E. Osman's Contract	.....		
Deduct—Amount transferred to Queen's Road intercepting Sewer as per Town Council's Resolution No. 2368, dated 17th Nov. 1882.	Rs. a. p. 24,317 0 0		
Amount transferred to ovoid sewer from Crawford Market to Mint (*vide* Standing Committee's Reso. No. 5264, dated 14th Nov. 1888)	5,890 11 4		
Do. do. do. ...	1,961 13 9		
	32,169 9 1		
	13,86,065 10 10		
Deduct—Amount paid from 6 Lakhs Loan	6,00,000 0 0		
	7,86,065 10 10		
DRAINAGE WORKS EXECUTED OUT OF THE 15 LAKHS LOAN, ONE OF THE 3 SANITARY WORKS LOANS, AGGREGATING Rs. 44 LAKHS.			
Queen's Road intercepting sewer, including compensation for land	Rs. a. p. 1,92,000 0 0		
Transfer from Surface Drainage Works as per Town Council's Resolution No. 2368, dated 17th Nov. 1882	24,317 0 0		
	2,16,317 0 0		
Less—Contribution received from Government ...50,000 0 0			
Cost of Establishment ...12,348 0 0			
	62,348 0 0		
	1,53,969 0 0		
House Connections without Privy fittings 5,71,165 0 0			
Add—Transferred from Argyll Road ovoid sewer, *vide* Standing Committee's Resolution No. 5192, dated 20th June 1888 19,046 14 4			
	5,90,211 14 4		
Less—Amount transferred to meet excess on pumping engines, Town Council's Reso. No. 52 of 13th January 1882	11,600 0 0		
	5,78,611 14 4		
15 Lakhs Loan carried over ...Rs.	7,82,580 14 4		
Surface Drainage Works carried over ...Rs.	7,86,065 10 10		

A. The contract for these works was let together to Messrs. Cowasji Sorabji Bhedwar & Co., and there is no excess on the totals.

B. Do. do. do. Syed Ebrahim Oosman & Co. do.

C. Do. do. do. Nagoo Sayaji & Co. do.

44 *Lakhs Sanitary Works Loan.*

Date of Repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	.....	1,57,326 7 7	1,57,326 7 7	.....	.....	.....
	.....	1,791 0 8	1,791 0 8	.....	.....	.....
	.....	5,599 10 0	5,599 10 0	.....	.....	.....
	.....	28,355 0 1	28,355 0 1	A.	.....	.....
	.....	25,336 2 1	25,336 2 1		.....	.....
	.....	31,711 15 6	31,711 15 6	B.	.....	.....
	.....	1,69,851 10 4	1,69,851 10 4		.....	.....
	.....	71,318 13 5	71,318 13 5		.....	.....
	.....	3,03,229 3 9	3,03,229 3 9		.....	.....
	.....	2,610 8 10	2,610 8 10		.....	.....
	.....	74,226 14 0	74,226 14 0	C.	.....	.....
	.....	1,86,225 12 6	1,86,225 12 6		.....	.....
	1,21,413 0 0	.....	1,21,413 0 0	.....	.....	.....
	.....	44,654 8 2	44,654 8 2	.....	.....	.....
	.....	.....	.....	.....	6,235 3 11	6,235 3 11
	.....	92,248 4 5	92,248 4 5	.....	.....	.....
	1,21,413 0 0	11,94,485 15 4	13,15,898 15 4	.....	6,235 3 11	6,235 3 11
	.....	6,00,000 0 0	6,00,000 0 0	.....	.....	.....
	1,21,413 0 0	5,94,485 15 4	7,15,898 15 4	.....	6,235 3 11	6,235 3 11
	.....	1,53,969 0 0	1,53,969 0 0	.....	.....	.....
	.....	2,27,630 12 10	2,27,630 12 10	.....	2,15,967 6 10	†2,15,967 6 10
	.....	3,81,599 12 10	3,81,599 12 10	.....	2,15,967 6 10	2,15,967 6 10
	1,21,413 0 0	5,94,485 15 4	7,15,898 15 4	.....	6,235 3 11	6,235 3 11

* Transferred from the Miscellaneous Works Loan of Rs. 10,08,500 as per Municipal Corporation Resolution No. 13404, dated 9th March 1893.

† Exclusive of Establishment charges to be paid out of the Loan Works Establishment Fund.

B—

Works sanctioned out of the

Nature of Loan Works.				Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised
				Rs. a. p.	Rs. a. p.	Rs. a. p.
Surface Drainage Works brought forward ...			Rs.	7,86,065 10 10		
15 Lakhs Loan brought forward ...			Rs.	7,32,580 14 4		
Automatic flushers at heads of gullies				5,570 0 0		
	Rs.	a.	p.			
Two more Pumping Engines	88,000	0	0			
Additional grant sanctioned under Town Council's Resolution No. 52, dated 13th January 1882 ...	9,600	0	0			
Extra machinery for engines	2,000	0	0			
				99,600 0 0		
House connections, Kamathipura				60,161 0 0		
Provision for shaft ventilators throughout				45,652 0 0		
Establishment...				89,239 0 0		
House connections survey				4,621 0 0		
Survey of pipe sewers				5,113 0 0		
Closing storm-water openings in Frere Road Sewer	Rs.	22,827				
Add—Amount transferred from Argyll Road Drain (*see* Standing Committee's Resolution No. 4657, dated 30th October 1889)	„	2,369				
				25,196 0 0		
DRAINAGE WORKS EXECUTED OUT OF LOAN, ONE OF THE 3 SANITARY WORKS LOANS, AGGREGATING Rs. 44 LAKHS.	Rs.	20,88,000		10,67,732 14 4		
Pipe sewer from Clare Road along south portions of Haines Road and DeLisle Road ...	1,05,955	0	0			
Add—Transferred from ovoid sewer, Argyll Rd.	3,783	15	1			
Do. Fort Drainage, Corporation's Resolution No. 1250, dated 5th June 1890 ...	4,521	1	6			
				1,14,260 0 7		
Pipe sewer from Parel Workshops to Clerke Road Ovoid Sewer..				65,891 0 0		
Extension of Clerke Road ovoid sewer to Parel Road				35,588 0 0		
Ovoid sewer across the Old Race Course ...	63,320	0	0			
Less—Transferred to construction of a double-storied chawl for Water Works men at Chinchpokli	850	3	8			
				62,469 12 4		
Ovoid sewer from the Crawford Market down Horaby Road and Bazar Gate, thence to the Mint	85,287	0	0			
Add—Amount transferred from Surface Drainage Works under Standing Committee's Resolution No. 5264, dated 14th November 1888 ...	5,890	11	4			
Do. do. do. ...	1,961	13	9			
				93,139 9 1		
Ovoid sewer, Argyll Road	25,200	0	0			
Less—Amount transferred to Khetwadi house-connections Rs. a. p. 19,046 14 4						
Amount transferred to 15 Lakhs Loan (closing storm-water entrance to Frere Road)—Standing Committee's Resolution No.4657, dated 30th Oct. 1889. 2,369 0 0						
Amount transferred to pipe sewer from Clare Road along south portion of Haines Road. 3,783 15 1						
	25,199	13	5			
				0 2 7		
Establishment				86,809 0 0		
				4,07,657 8 7		
Carried over...			Rs.	22,61,456 1 9		

continued.

44 *Lakhs Sanitary Works Loan.*

Date of Repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	1,21,413 0 0	5,94,485 15 4	7,15,898 15 4	.....	6,235 3 11	6,235 3 11
	.....	3,81,599 12 10	3,81,599 12 10	.....	2,15,967 6 10	2,15,967 6 10
	.....	.....	.....	.....	5,570 0 0	5,570 0 0
	.....	98,438 1 9	98,438 1 9	.....	.....	.....
	.....	34,977 7 5	34,977 7 5	.....	.....	.....
	.....	44,947 0 6	44,947 0 6	.....	.....	.....
	88,869 0 0	.....	88,869 0 0	.....	.....	.....
	4,561 13 3	.....	4,561 13 3	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	17,108 9 6	17,108 9 6	.....	.....	.....
	93,430 13 3	5,77,071 0 0	6,70,501 13 3	.....	2,21,537 6 10	2,21,537 6 10
	.....	1,14,260 0 7	1,14,260 0 7	.....	.....	.....
	.....	65,793 9 11	65,793 9 11	.....	.....	.....
	.....	35,569 8 0	35,569 8 0	.....	.....	.....
	.....	59,746 13 2	59,746 13 2	.....	.....	.....
	.....	89,401 11 9	89,401 11 9	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	36,309 0 0	.....	36,309 0 0	.....	.....	.....
	36,309 0 0	3,64,771 11 5	4,01,080 11 5	.....	.....	.....
	2,51,152 13 3	15,36,328 10 9	17,87,481 8 0	.....	2,27,772 10 9	2,27,772 10 9

B—

Works sanctioned out of the

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward ...Rs.	22,61,456 1 9		
WATER WORKS.			
1. Malabar Hill Reservoir	4,00,000 0 0		
2. Tulsi gathering ground, purchase of	96,836 0 0		
3. Improving water-supply of the outlying districts, Rs. 7,14,000—Rs. 1,083-2-8 transferred to Vehar filter beds	7,12,916 13 4		
Rs. a. p.			
4. Construction of filter beds at Vehar ... 1,01,000 0 0			
Add—Transferred ... 12,216 15 11*			
	1,13,216 15 11		
5. Raising the Tulsi Dams (including pitching of dams) Rs. 1,38,000—Rs. 7,793-10-4 transferred to Vehar filters	1,30,206 5 8		
6. Providing additional catch-water channels at Vehar and Tulsi Rs. 1,15,716—Rs. 10,285-1-3 transferred to meet excess on Bhandarwada Loan	1,05,430 14 9		
7. Check meters for prevention of waste of water Rs. 1,50,000 —Rs. 2,911-1-6 transferred to Vehar filters and Rs. 13,399-10-6 transferred to meet excess on Bhandarwada Loan	1,33,689 4 0		
8. New hydrants	22,900 0 0		
Rs. a. p.			
9, Construction of a double-storied chawl for the Water Works staff and quarters for the Superintendent... ... ... 30,577 0 0			
Add—Transferred from Ripon Road Ovoid Sewer grant ... 850 3 8			
Do. Ripon Road grant ... 425 0 0			
1,275 3 8			
	31,852 3 8		
10. Provision of a turbine at the Malabar Hill Reservoir ...	2,500 0 0		
11. Enlargement of different mains, &c.	1,12,892 0 0		
12. New water main from the Junction of Nesbit Road ...	15,000 0 0		
Excess on Bhandarwada Water Works Loan—			
Rs. a. p.			
Transferred from catch-water channels at Vehar and Tulsi... 10,285 1 3			
Do. do. Check meters for prevention of waste water 13,399 10 6			
	23,684 11 9		
	19,00,625 5 1		
ROADS.			
New road from Bellasis Road across Old Race Course 1,43,292 0 0			
Deduct—Amount transferred to Water Works chawl 425 0 0			
	1,42,867 0 0		
Carried over ...	43,04,948 6 10		

* Transferred from improving the water-supply of the outlying districts ... Rs. 1,083 2 8
Do. Raising the Tulsi Dam ... 7,793 10 4
Do. Check meters 2,911 1 6
Do. Bori Bandar Stables 429 1 5
12,216 15 11

continued.

44 *Lakhs Sanitary Works Loan.*

Date of Repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	2,51,152 13 3	15,36,328 10 9	17,87,481 8 0	.....	2,27,772 10 9	2,27,772 10 9
	41,566 0 0	3,58,434 0 0	4,00,000 0 0	.....	.....	.....
	.....	94,500 0 0	94,500 0 0	.....	.....	.....
	30,365 0 0	6,82,065 0 8	7,12,430 0 8	.....	.....	.....
	8,783 0 0	1,04,433 15 11	1,13,216 15 11	.....	.....	.....
	10,434 0 0	1,17,520 15 5	1,27,954 15 5	.....	.....	.....
	10,062 0 0	95,368 14 9	1,05,430 14 9	.....	.....	.....
	6,522 0 0	1,27,132 14 8	1,33,654 14 8	.....	.....	.....
	1,991 0 0	20,876 7 1	22,867 7 1	.....	.....	.....
	2,659 0 0	29,182 3 3	31,841 3 3	.....	.....	.....
	218 0 0	2,282 0 0	2,500 0 0	.....	.....	.....
	9,786 0 0	1,03,180 8 6	1,12,966 8 6	.....	.....	.....
	.....	15,000 0 0	15,000 0 0	.....	.....	.....
	.....	23,684 11 9	23,684 11 9	.....	.....	.....
	1,22,336 0 0	17,73,611 12 0	18,95,947 12 0	.....	.....	.....
	12,461 0 0	1,29,039 1 2	1,41,500 1 2	.....	.....	.....
	3,85,949 13 3	34,38,979 7 11	38,24,929 5 2	.....	2,27,772 10 9	2,27,772 10 9

B—

Works sanctioned out of the

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward ...	43,04,948 6 10		
OTHER SANITARY WORKS.			
Enlargement of *Dhobi Lines* at Mahaluxmi	50,000 0 0		
Chawl for Gowlis working at the Agripada Milch Cattle Stables	6,237 0 0		
Rs. a. p.			
Health Department stables at Bori Bandar 50,000 0 0			
Less—Transferred to construction of filter beds at Vehar 429 1 5			
	49,570 14 7		
	1,05,807 14 7		
Grand Total 44 Lakhs Sanitary Works Loan... *	44,10,756 5 5	44,10,756 5 5	44,10,756 5 5
Deduct—Savings on the following works transferred to meet the cost of other works as sanctioned in the Municipal Corporation Resolution Nos. 11358, dated 14th January 1892, and 13318, dated 25th February 1892—			
Tulsi gathering ground	1,836 0 0		
Improving water-supply of the outlying districts ...	486 12 8		
Raising Tulsi Dams	2,251 6 3		
Check meters	34 5 4		
New hydrants	32 8 11		
Water Works chawl and quarters for the Superintendent	11 0 5		
Enlargement of mains, &c.	25 7 6		
		4,677 9 1	
Rs. a. p.			
Surface Drainage Works 61,826 3 1			
Kamathipura privy connections ... 25,183 8 7			
Pumping engines and machinery ... 1,161 14 3			
Establishment for Drainage Works executed out of the 15 lakhs Loan... 370 0 0			
House connections survey 59 2 9			
Pipe sewer, Parel Workshops 97 6 1			
Extension of Clerke Road sewer ... 18 8 0			
Ovoid sewer across old Race Course... 2,722 15 2			
Do. Crawford Market.. 3,737 13 4			
Do. Argyll Road ... 0 2 7			
	95,177 9 10		
Enlargement of the Dhobi Lines ... 17,152 3 9			
Bori Bunder Stables 1,545 1 4			
	18,697 5 1		
		1,13,874 14 11	1,18,552 8 0
		Rupees ...	42,92,203 13 5

* Includes Rs. 4,521-1-6 transferred from the 7 lakhs Sanitary Works Loan and Rs. 6,235-3-11 from the Miscellaneous Works Loan of Rs. 10,08,500 as per Corporation Resolutions No. 1250, dated 5th June 1890, and No. 13404, dated 9th March 1893.

concluded.

44 *Lakhs Sanitary Works Loan.*

Date of Repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	3,85,949 13 3	34,38,979 7 11	38,24,929 5 2	.....	2,27,772 10 9	2,27,772 10 9
	4,348 0 0	28,499 12 3	32,847 12 3	.....	.....	.....
	107 2 6	6,129 13 6	6,237 0 0	.....	.....	.....
	4,348 0 0	43,677 13 3	48,025 13 3	.....	.....	.....
1st July 1925	8,803 2 6	78,307 7 0	87,110 9 6	.....	.....	.....
	3,94,752 15 9	35,17,286 14 11	39,12,039 14 8	.....	2,27,772 10 9	2,27,772 10 9

C
7 Lakhs Sanitary

Nature of Loan Works.	Estimated cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Drainage of the Fort 4,53,329 0 0			
Less—Transferred to Pipe Sewer from Clare Road along south portions of Haines Road (Corporation Resolution No. 1250 of 5th June 1890) 4,521 1 6			
	4,48,807 14 6		
2. Additional works at Love Grove Pumping Station ...	39,724 0 0		
3. Constructing pipe drains in certain roads in Khetwadi ...	6,290 0 0		
4. Do. side drain in Wari Bandar Road	9,046 0 0		
5. Extra grant on account of Queen's Road intercepting sewer	13,544 0 0		
6. Malabar Hill Reservoir roofing, extra grant...	1,58,750 0 0		
7. Increasing and improving the distribution of water-supply and providing higher levels, Tulsi District, with filtered water	21,050 0 0		
8. Extra grant for the adjustment of expenditure on Bhandarwada Reservoir Works, new Outlet Tower at Vehar, less savings on 17 lakhs Loan Works and various Water Works included in the Sanitary Works Loan of 44 lakhs..	10,589 0 0		
	7,07,800 14 6		
Or say, Rupees	*6,95,478 14 6	*6,95,478 14 6	*6,95,478 14 6
Deduct—Savings on the following works transferred to meet the cost of other works as per Municipal Corporation Resolution Nos. 11358, dated 14th January 1892, and 13318, dated 25th February 1892—Malabar Hill Reservoir Roofing.	44,710 13 6		
Increasing and improving the distribution of Water Supply, Tulsi District	838 7 8		
Extra grant for the adjustment of excess on Bhandarwada Works, &c.	2,598 5 6		
		48,147 10 8	
Net Savings on Drainage Works	.. ...	1,786 5 9	
			49,934 0 5
			6,45,544 14 1

* Excluding Rs. 4,521-1-6 transferred as per Corporation's Resolution No. 1950,

D.—*Tansa Loan of Rupees*

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Tansa Works—Paid out of Loan...	1,47,00,000 0 0	1,47,00,000 0 0	1,47,00,000 0 0
Paid and to be paid out of premia as sanctioned in Municipal Corporation Resolutions Nos. 7278 and 12963, dated 7th October 1891 and 23rd February 1893 respectively	.....	.....	.....
Rs. ...	1,47,00,000 0 0	1,47,00,000 0 0	1,47,00,000 0 0

Works Loan.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Amount of 10 per cent. transferred to Loan Works Establishment Fund.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	39,419 0 0	3,58,853 13 9	3,98,272 13 9	.....	10,000 0 0	10,000 0 0
	.....	34,645 9 6	34,645 9 6	.....	.....	.....
	.....	5,282 6 0	5,282 6 0	.....	.....	.....
	.....	4,934 0 1	4,934 0 1	.....	.....	.....
	.....	9,638 10 8	9,638 10 8	.....	.....	.....
	.....	1,14,039 2 6	1,14,039 2 6	.....	.....	.....
	.....	20,211 8 4	20,211 8 4	.....	.....	.....
	.....	7,990 10 6	7,990 10 6	.....	.....	.....
1st Feb. 1928.	39,419 0 0	5,55,590 13 4	5,95,009 13 4	.....	10,000 0 0	10,000 0 0

dated 5th June 1890, to meet excess in the grant for Agripada Pipe Sewer Work.

1 *Crore and* 47 *Lakhs.*

Dates of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Between 1st January 1928 and 1st January 1953.	5,43,681 2 8	1,41,56,818 13 4	1,47,00,000 0 0	.....	.....	.....
	.....	1,21,914 5 5	1,21,914 5 5	2,556 0 0	1,15,529 10 7	1,18,085 10 7
	5,43,681 2 8	1,42,78,233 2 9	1,48,21,914 5 5	2,556 0 0	1,15,529 10 7	1,18,085 10 7

E.

Loan of 12 *Lakhs for Drainage*

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a p.	Rs. a. p.
1. Queen's Road House Sullage water connections	11,14,929 0 0		
2. Water mains in Frere Road	85,000 0 0		
	11,99,929 0 0		
Or say, Rupees... ...	12,00,000 0 0	12,00,000 0 0	12,00,000 0 0
Deduct—Savings transferred as under to meet cost of other works as sanctioned in Municipal Corporation's Resolution Nos. 11358, dated 14th January 1892, and 13318, dated 25th February 1892—			
Unappropriated balance of the amount of Rs. 11,15,000 sanctioned for the Queen's Road House Sullage water connections		71 0 0	
Water mains in Frere Road		4,968 11 0	
			5,039 11 0
			11,94,960 5 0

F.

Loan of Rupees 10,08,500 *for*

Nature of Loan Works.	Estimated cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p
New Market at Colaba paid out of the Loan	50,300 0 0		
Do. cost of site partly paid out of the premia received on the loan (Rs. 21,940) and partly by an advance from surplus balances (Rs. 28,060), *vide* Municipal Corporation's Reso. No. 1200, dated 19th May 1892.	.....		
Erskine Road Market Extension paid out of the loan	3,99,758 0 0		
Excess paid out of the premia received on the loan as per Municipal Corporation Reso. No. 2758, dated 11th June 1891...	.....		
Arthur Crawford Market Extension	49,942 0 0		
	5,00,000 0 0	5,00,000 0 0	
Extension of Parel Storm-water Drain to Shepherd Road ...	33,742 0 0	}	
Storm-water Drain from Bellasis Road to ⅔ the length of Ripon Road	23,436 0 0	}	
9" Pipe Sewer along Bellasis Road, Foras Road, and Gilder Street	29,822 0 0		
Concrete Trench Waste Weir, Vehar	35,000 0 0		
Mains in 14 Streets, west of Frere Road...	17,325 0 0	}	
Do. various Streets	51,475 0 0	}	
Arthur Road Connection Works	13,200 0 0		
Deacon's meters	18,000 0 0		
Cross Road at Mahaluxmi Station	23,000 0 0		
Road through Navroji Hill	2,63,875 0 0		
Ward Office at Dadar (from surplus balances pending final adjustment)	.....		
	5,08,875 0 0	5,08,875 0 0	
Total ...Rs.	10,08,875 0 0	10,08,875 0 0	10,08,500 0 0
Less—Savings on the following works transferred to meet the cost of other works as per Corporation Resolutions No. 11358, dated 14th January 1892, No. 13318, dated 25th February 1892, and No. 188, dated 6th April 1892; and to meet the cost of land acquired in connection with the formation of the storm-water reservoir on the flats as per Municipal Corporation Resolution No. 13404, dated 9th March 1892—			
Extension of Parel Road Storm-water drain to Shepherd Road Storm-water drain from Bellasis Road to ⅔ the length of Ripon Road	16,071 9 3		
9" Pipe Sewer along Bellasis and Foras Roads and Gilder Street	12,484 6 0	28,555 15 3	
Concrete Trench Waste Weir, Vehar Lake...	4,391 8 11		
Mains in 14 Streets west of Frere Road and in various Streets	9,524 14 4		
Deacon's meters...	1,212 0 0		
Arthur Road Connection Works	3,657 5 7	18,785 12 10	47,341 12 1
			9,61,158 3 11

and Water Works.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	46,022 14 5	8,41,135 13 4	8,87,158 11 9	.....	2,27,770 4 3	2,27,770 4 3
	918 8 9	79,112 12 8	80,031 5 0	.....	.....	.....
1st Jan. 1928	46,941 7 2	9,20,248 9 7	9,67,190 0 9	.....	2,27,770 4 3	2,27,770 4 3

Miscellaneous Works.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p
	.....	250 0 0	250 0 0			
				3,240 0 0	46,810 0 0	50,050 0 0
	.....	50,000 0 0	50,000 0 0			
	.....	3,99,758 0 0	3,99,758 0 0			
				.....	.....	.....
	.....	31,908 11 11	31,908 11 11			
	1,321 14 11	2,064 14 8	3,386 13 7	1,678 1 1	44,877 1 4	46,555 2 5
	1,321 14 11	4,83,981 10 7	4,85,303 9 6	4,918 1 1	91,687 1 4	96,605 2 5
	1,839 15 7	39,266 7 2	41,106 6 9	.....	.....	.....
	1,587 12 11	15,702 11 2	17,290 8 1	.....	.....	.....
	1,324 6 2	29,284 0 11	30,608 7 1	.....	.....	.....
	1,321 1 7	57,954 0 1	59,275 1 8	.....	.....	.....
	.....	9,542 10 5	9,542 10 5	.....	.....	.....
	.....	16,788 0 0	16,788 0 0	.....	.....	.....
	.....	19,594 4 8	19,594 4 8	.....	.....	.....
	.....	75 0 0	75 0 0	7,680 0 0	2,56,120 0 0	2,63,800 0 0
	.....	14,140 0 0	14,140 0 0	.....	.....	.....
	6,073 4 3	2,02,347 2 5	2,08,420 6 8	7,680 0 0	2,56,120 0 0	2,63,800 0 0
1st Oct. 1928	7,395 3 2	6,86,328 13 0	6,93,724 0 2	12,598 1 1	3,47,807 1 4	3,60,405 2 5

G.

Loan of Rs. 2,48,000 *for Agripada*

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Agripada House Sullage Water Connections	2,48,642 0 0	2,48,000 0 0	2,48,000 0 0

H.

35 Lakhs various

Nature of Loan Works.	Estimated Cost of each Work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Pawai Water Works	7,00,000 0 0		
2. Additional Water Mains	1,00,000 0 0		
3. Improvement Works at the Malabar Hill Reservoir ...	1,00,000 0 0		
4. Extension of Catch-water Channels at Tulsi...	20,836 9 1		
5. Roads and Streets in Agripada and elsewhere. Paid out of the Loan	15,00,000 0 0		
6. Advanced and to be advanced for the purchase of frontages at Agripada, &c., as per Corporation Resolution No. 10531, dated 11th January 1893	.....		
7. Difference between the amount provided in the Loan of Rs. 10,08,500 for road through Navroji Hill Road from Elphinstone Bridge to Dongri Street, and the revised amount sanctioned for the road in Municipal Corporation Resolution No. 5293, dated 19th November 1888 ...	68,148 0 0		
8. Sewer flushing arrangements	14,000 0 0		
9. Purchase of land on the Flats for the disposal of town sweepings	2,00,000 0 0		
10. Health Department bullock stables and quarters for scavengers	1,50,000 0 0		
11. Chawl for Halalkhors in Cursetji Sooklaji Street	97,847 0 0		
12. Labourers' quarters in connection with the Arthur Crawford Markets	22,700 0 0		
13. Purchase of land at Arthur Road	28,676 0 0		
14. Bhuleshwar Market extension	4,50,000 0 0		
15. New Market at Foras Road	50,000 0 0		
	34,97,207 9 1		
or say	35,00,000 0 0	35,00,000 0 0	35,00,000 0 0

I.

Loan of Rs. 8 *Lakhs for New*

Nature of Loan Works.	Estimated cost to be met from Loan.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Municipal Office Building	8,00,000 0 0	8,00,000 0 0	8,00,000 0 0

* Excluding Rs. 7,34,326-8-3 paid from invested fund, *viz.*

House Sullage Water Connections.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1st July 1929	15,580 8 4	2,05,785 13 7	2,21,366 5 11	.....	10,000 0 0	10,000 0 0

Sanitary Works Loan.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	15,952 3 7	4,75,651 0 7	4,91,603 4 2	.....	2,08,396 11 10	2,08,396 11 10
	584 5 8	97,801 11 2	98,386 0 10	.....	.....	.....
	1,916 3 10	90,780 7 4	92,696 11 2	.....	7,303 4 10	7,303 4 10
	455 3 2	20,381 5 11	20,836 9 1	.....	.....	.....
	5,886 13 9	14,94,113 2 3	15,00,000 0 0	4,686 2 5	5,38,592 10 6	5,43,278 12 11
	.....	2,06,721 3 1	2,06,721 3 1			
	.....	.....	.....	.....	68,148 0 0	68,148 0 0
	.....	9,284 9 2	9,284 9 2	.....	4,715 6 10	4,715 6 10
	.....	1,98,913 8 8	1,98,913 8 8	.....	.....	.....
	.....	.....	.....	6,000 0 0	1,44,000 0 0	1,50,000 0 0
	2,568 7 5	78,552 5 1	81,120 12 6	.....	16,726 3 6	16,726 3 6
	.....	.....	.....	.....	22,700 0 0	22,700 0 0
	.....	.....	.....	.....	23,676 0 0	23,676 0 0
	.....	2,67,801 2 7	2,67,801 2 7	2,280 0 0	1,79,918 13 5	1,82,198 13 5
	1,025 11 11	14,478 1 4	15,503 13 3	952 4 1	33,548 14 8	34,496 2 9
1st July 1930	28,389 1 4	29,54,478 9 2	29,82,867 10 6	13,918 6 6	12,47,721 1 7	12,61,639 8 1

Municipal Office Building.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1st July 1931	9,106 0 0	5,46,678 3 7	*5,55,784 3 7	4,066 4 6	2,39,200 12 5	2,43,267 0 11

Rs. 22,099-1-0 on Establishment and Rs. 7,12,227-7-3 on Works.

J

Loan of Rs. 4½ Lakhs for Fire

Nature of Loan Works.	Estimated cost of each work.	Amount of Loan sanctioned.	Amount actually raised.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Land and Buildings for Fire Brigade	4,50,000 0 0	4,50,000 0 0	2,50,000 0 0
To be raised in 1893-94			2,00,000 0 0
Total ...Rs.	4,50,000 0 0	4,50,000 0 0	4,50,000 0 0

Brigade Quarters and Stations.

Date of repayment of the Loan.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1st Jan. 1923...	3,822 3 11	38,943 6 2	42,265 10 1	9,636 0 0	3,98,098 5 14	4,07,734 5 14
.....	.....	.....	.....	.....	.....	.....
	3,822 3 11	38,943 6 2	42,265 10 1	9,636 0 0	3,98,098 5 11	4,07,734 5 11

K.

Works sanctioned out of Savings on former Loan Works already completed.

Nature of Loan Works.	Estimated cost to be met from Loan.	Expenditure up to 31st March 1893.			Estimated expenditure for 1893-94.		
		Establishment.	Works.	Total.	Establishment.	Works.	Total.
WATER WORKS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Construction of the residence of the Chief Inspector of Water Works	46,360 0 0	.....	.....	.....	.....	46,360 0 0	46,360 0 0
Covering the storage basin of the Bhandarwada Reservoir and the construction of filters over it	44,597 14 4	.....	.....	.....	3,000 0 0	41,597 14 4	44,597 14 4
DRAINAGE.							
Main Sewerage, Parel	77,603 0 0	4,019 8 7	10,216 1 5	14,235 10 0	1,256 0 0	62,111 6 0	63,367 6 0
Branch Pipe Sewers at Parel	20,852 0 0	946 14 8	4,203 11 0	5,150 9 8	545 0 0	15,156 6 4	15,701 6 4
Arching over main drain at Arthur Road ...	18,000 0 0	248 3 0	128 9 7	376 12 7	318 0 0	17,305 3 5	17,623 3 5
Completing the storm-water drain, Hornby Road	21,598 0 0	1,443 2 5	10,456 9 3	11,899 11 8	50 0 0	9,648 4 4	9,698 4 4
Total...Rs.	2,29,010 14 4	6,657 12 8	25,004 15 3	31,662 11 11	5,169 0 0	1,92,179 2 5	1,97,348 2 5

L.

Advances for Works for which Loans are either not sanctioned or raised.

Nature of Works.	Expenditure up to 31st March 1893.			Estimated Expenditure for 1893-94.		
	Establishment.	Works.	Total.	Establishment.	Works.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs a. p.	Rs. a. p.
Improvement and extension of the Victoria Gardens	.....	4,48,660 14 1	4,48,660 14 1	.....	1,974 15 6	1,974 15 6
Pumps and steam engines required for the working of the Love Grove Pumping Station	2,110 7 10	3,78,655 9 5	*3,80,766 1 3	1,620 0 0	1,18,561 14 9	1,20,181 14 9
Laying 27" and 24" Mains from Malabar Hill Reservoir to the Frere Fountain, Fort	975 0 0	49,118 1 2	50,093 1 2	.....	.....	.....
Survey for pipe sewers in Umarkhari and other districts ...	11,621 6 1	.....	11,621 6 1	.....	.....	.....
Connections at Chinchpokli between Tansa and Vehar Mains..	.....	4,216 12 2	4,216 12 2	.....	2,947 11 10	2,947 11 10
Filling in rocky and unserviceable parts of the Roman Catholic Cemetery at Sewri	363 13 5	9,514 0 0	9,877 13 5	.....	.....	.....
Purchasing and fixing 1,000 boundary stones for the pipe line from Kurla to Vehar and Bandora to Tulsi	.....	1,312 8 0	1,312 8 0	.....	.....	.....
Altering drawings for the sewerage in Umarkhari District, &c...	458 6 9	.....	458 6 9	.....	.....	.....
Health Department stables in F and G Wards	.....	.....	.....	3,816 0 0	74,928 0 0	78,744 0 0
Do. Biggaries' chawl at Bori Bunder	.....	.....	.....	3,360 0 0	62,640 0 0	66,000 0 0
Extension of water main in various places	.....	.....	.....	210 0 0	29,790 0 0	30,000 0 0
Sewerage of Colaba (Shone system)	.....	.....	.....	31,260 0 0	3,15,813 0 0	3,47,073 0 0
Storm-water drains, &c., in different places	.....	.....	.....	1,113 0 0	19,012 0 0	20,125 0 0
Milch cattle stables at Mody Bay	.....	.....	.....	936 0 0	19,695 0 0	† 20,631 0 0
Further alterations and improvements at Malabar Hill Reservoir	.....	.....	.....	.....	70,000 0 0	† 70,000 0 0
Road from Vehar to Tulsi with a light tramway to carry pipes.	.....	.....	.....	1,000 0 0	.....	† 1,000 0 0
New distributing mains	.....	.....	.....	10,932 0 0	5,74,068 0 0	†5,85,000 0 0
Total ...Rs.	15,529 2 1	8,91,477 12 10	9,07,006 14 11	54,247 0 0	12,89,430 10 1	13,43,677 10 1

* Including Rs. 40,000 to be adjusted against the sale proceeds of the old Engines and Pumps.

† These works have been entered here from the statement submitted by the Executive Engineer, although the Corporation have neither sanctioned advances being made for these works nor have they sanctioned the raising of a loan.

SUMMARY.

	Amount of Loan sanctioned or raised plus additional grants and minus transfers.	Expenditure up to 31st Mar. 1893.	Estimated Expenditure for 1893-94.	Total.	Probable Balance on 31st March 1894.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
27 Lakhs Drainage and Water Works Loan as per statement A	26,79,621 13 3	26,45,801 10 3	33,820 3 0	26,79,621 13 3	.....
44 Lakhs Sanitary Works Loan as per statement B	42,92,203 13 5	39,12,039 14 8	2,27,772 10 9	41,39,812 9 5	1,52,391 4 0
7 Do. do do. do. C	6,45,544 14 1	5,95,009 13 4	10,000 0 0	6,05,009 13 4	40,535 0 9
Tansa Water Works Loan of Rs. 1 Crore and 47 Lakhs as per statement D ...	1,47,00,000 0 0	1,48,21,914 5 5	1,18,085 10 7	*1,49,40,000 0 0	.....
12 Lakhs Drainage and Water Works Loan as per statement E	11,94,960 5 0	9,67,190 0 9	2,27,770 4 3	11,94,960 5 0	.....
Loan of Rs. 10,08,500 for Miscellaneous Works as per statement F	9,61,158 3 11	6,93,724 0 2	3,60,405 2 5	† 10,54,129 2 7	3,077 13 3
Agripada House Sullage Water Connections Loan as per statement G... ...	2,48,000 0 0	2,21,366 5 11	10,000 0 0	2,31,366 5 11	16,633 10 1
35 Lakhs Various Sanitary Works Loan as per statement H	35,00,000 0 0	29,82,867 10 6	12,61,639 8 1	‡ 42,44,507 2 7	5,492 13 5
Municipal Building Loan of Rs. 8 lakhs as per statement I	8,00,000 0 0	5,55,784 3 7	2,43,267 0 11	7,99,051 4 6	948 11 6
4½ Lakhs Fire Brigade Loan as per statement J.	4,50,000 0 0	42,265 10 1	4,07,734 5 11	4,50,000 0 0	.....
Works sanctioned out of savings on different loans as per statement K... ...	2,29,010 14 4	31,662 11 11	1,97,348 2 5	2,29,010 14 4	.....
Total ... ...Rs.	2,97,00,500 0 0	2,74,69,626 6 7	30,97,843 0 4	3,05,67,469 6 11	2,19,079 5 0
Advanced for works for which loans are either not sanctioned or raised as per statement L	.....	9,07,006 14 11	13,43,677 10 1	22,50,684 9 0	
Grand Total ...Rs.	2,97,00,500 0 0	2,83,76,633 5 6	44,41,520 10 5	3,28,18,153 15 11	

* Of this amount, Rs. 2,40,000 are sanctioned to be met out of the premia received on the Loan.
† Of this amount, Rs. 53,848-11-11 are sanctioned to be met from the premia received on the Loan and Rs. 42,260 have been advanced from available balances.
‡ Including Rs. 7½ lakhs sanctioned to be advanced for the purchase of land at Agripada.

Resolved : "That the following be *recorded* :—Memorandum No. 11292, dated 31st ultimo, from the Commissioner, forwarding, with reference to the resolution of the late Town Council, No. 1444, dated 22nd December 1886, letter No. 1929, dated 29th ultimo, from the Chief Accountant, enclosing 12 statements, marked A to L, showing the estimated cost of each loan work and expenditure on different loans, &c., up to 31st March 1893."*

No. 5769.

Considered the following :—

No. 12013 OF 1893-94.

BOMBAY, 9*th September* 1893.

TO THE MUNICIAL SECRETARY.

Memorandum.—With reference to Standing Committee's Resolution No. 2668 of 21st June last, the Commissioner has the honor to forward a very full and careful report with two tracings by the Executive Engineer. That officer has discussed the question in all its bearings, and after carefully considering the subject with him the Commissioner concurs in his conclusions. He will not, however, give any orders altering the regular line until he knows the views of the Standing Committee. The proper thing to do appears to be to provide as soon as possible for the reconstruction of all the old portions of the retaining-wall (Rs. 18,221), excepting the part from E southward, leaving the additions to, and improvement of the road itself to be carried out by degrees out of the road improvement grant. Several projects for road improvement, involving large sums, are before the Standing Committee, and though the Corporation has a considerable surplus balance, the Commissioner is reluctant to trench on it more than can be helped until he has some knowledge of the effect on the revenue of the recent *riots*, which it is possible may, for the time being, be serious.—H. A. ACWORTH, Commissioner.

No. 7440 OF 1893-94.

BOMBAY, 30*th August* 1893.

TO THE COMMISSIONER.

SIR,—I have the honour to submit herewith two tracings marked No. 1 and No. 2 of the Walkeshwar Road, the retaining wall of which having given way at different times since 1889-90

---

* On the suggestion of the Hon'ble Mr. Javerilal U. Yajnik, it was decided that the 4 following items in Statement L, page 21, be omitted, as no sanction has yet been given to the raising of a loan for such works :—

	Establishment.	Works.	Total.
	Rs.	Rs.	Rs.
Milch cattle stables at Mody Bay	936	19,695	20,631
Further alterations and improvements at Malabar Hill Reservoir	.....	70,000	70,000
Road from Vehar to Tulsi with a light tramway to carry pipes	1,000	.....	1,000
New distributing mains	10,932	5,74,068	5,85,000

had to be subsequently rebuilt at the spots indicated thereon. The break-downs have in each case occurred in the old retaining wall. In my opinion they were due to its ill construction and want of the requisite strength coupled with the weakness of the foundations, which and the superstructure seem in all possibility to have been affected by the landsprings. The failures are not confined to any one particular place, neither have they occurred at the points where the wall was rebuilt, but only in the old places, which, as stated above, have been badly built.

The following allotments for rebuilding the wall were made in previous budgets, namely :—

In 1892-93	...	Rs. 5,000
,, 1891-92	...	,, 5,000
,, 1889-90	...	,, 4,150
	Total...	Rs. 14,150

No provision is made for this work in the budget of the current year.

It cannot be ascertained whether any expenditure was incurred in repairing or rebuilding any portion of this wall in years previous to 1889-90.

The chances of injury to the road would, no doubt, be lessened were its line shifted so far back as to be beyond the reach of the sea. The process, however, would involve a very heavy expenditure without any corresponding advantage. A large area of valuable land would have to be acquired on the hillside of the road and much cutting would have to be done.

In my opinion there would be no danger of injury to the road by the sea were those portions of the retaining-wall which are yet to be rebuilt, reconstructed of the required section with sound materials. I have had the foundations of the wall opened out in three places and found them to be on moorum, not on quicksand.

In the accompanying two tracings four different proposals for improving the road are shown. In tracing No. 1 the red lines indicate the present regular line of the street. Were the existing road improved as shown in red lines, it would entail the necessity of the acquisition of a large area of valuable land on the hillside of the road. The probable cost of doing this work would be about Rs. 71,681, which would be scarcely compatible with the small advantage to be gained therefrom. I would, under the circumstances, refrain from recommending this scheme for adoption.

The second proposal is to rebuild the remaining portions, AB and CD in tracing No. 2, of the old wall in their present positions. The probable cost of this work would be Rs. 18,221, while there will be no improvement to speak of, the road remaining as tortuous as it is at present.

The third proposal is to make the road as marked out in tracing No. 1 by red lines, except at the places where it is shown by green lines. By this arrangement a less area of ground will be

required to be taken up from the west side of the road and the road line will not be so tortuous as at present. The probable cost of this work is estimated at Rs. 52,607.

The fourth proposal is to have the road as shown by the blue lines in tracing No. 2. In this scheme, while the existing line of the road is followed, the acquisition of land from the hillside is avoided as much as possible. This arrangement will enable the utilization of the portions of the wall already rebuilt. The probable cost of this work is estimated at Rs. 39,234. Everything considered, the fourth proposal is the one which most recommends itself for adoption. It is not so expensive as either of the proposals No. 1 or No. 3, while the improvement to the road would be considerable and the new walls will come into use. The probable cost of constructing the new sea-wall in this case would be about Rs. 19,353, which, if sanctioned now, would enable me to take the work in hand at once, leaving the improvement on the west or hillside to be done when more funds are available. I may point out that in the proposal recommended for adoption, the retaining-wall of the road at the foot of the hill is advanced further towards the sea, there being no danger whatever, in my opinion, so far, as the structure will be strong enough to withstand the force of the sea.—I have, &c., M. C. MURZBAN, Executive Engineer.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik, Esq.—

"That the following sub-committee be appointed to report on the proposals for the repair of the retaining wall of Walkeshwar Road :— No. 5770.

"Mr. Roughton, Chairman, Mr. Bhalchandra K. Bhatawadekar, Mr. Carroll, the Hon'ble Mr. Javerilal U. Yajnik."

Carried.

Considered the following :—

No. 12216 OF 1893-94.

BOMBAY, 13*th September* 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—I have the honor to forward a report from Mr. J. W. Smith, Special Drainage Engineer, on the sewerage of the Umerkhari Drainage District, together with estimates, plans and sections. The scheme includes the following two items appearing at page 76 of the Budget :—

Sewerage of Umerkhari District	Rs. 3,08,327
Branch sewer from Kavasji Patel Tank Road to Parel Road	„ 41,632
	Rs. 3,49,959

Mr. Smith's estimates amount to Rs. 3,47,464, including a provision of 15 % for contingencies, and a small saving of Rs. 2,495 is thus indicated.

The so-called Umerkhari Drainage District fills up the gap between the first drainage section on the east, south, and west, and on the north the Jail, Babula Tank, and a line very slightly south of Grant Road, or, to be quite exact, the line of Khara Talao Street. The pipe sewers will lead (with a few exceptions) to the ovoid sewer described above in a quotation from the Budget as a branch sewer from Kavasji Patel Tank Road to Parel Road, but which should be called a branch sewer from Parel Road along Erskine Road and Kavasji Patel Tank Road to the main sewer in Girgaum Back Road. Mr. Smith has, by fixing the crown of this ovoid branch sewer at the same level as that of the main sewer, been able to save money in excavation and to obtain a much better connection, thus avoiding the mistake of bringing the invert of the smaller sewer in on the same level as that of the larger, which has given us so much trouble with the Queen's Road sewer. As regards other details, Mr. Smith's report speaks for itself. There is nothing of a new or unusual character about the proposals, which are all on the ordinary gravitation lines. I think, therefore, they may be sanctioned as they stand, to be paid for out of the loan, concerning which I have already sent in a report to the Standing Committee and Corporation.—I have, &c., H. A. ACWORTH, Commissioner.

No. S. D. 390 OF 1893-94.

BOMBAY, *6th September* 1893.

TO THE COMMISSIONER.

SIR,—I have the honor to submit herewith a modification of the proposals contained in my No. D-12698, dated 23rd December 1889, for the sewerage of the district which, as explained under that number, I have called the Umerkhari District, including an ovoid sewer from the Kavasji Patel Tank through Kavasji Patel Tank Street and Erskine Road to Parel Road (Bhendy Bazaar).

2. The accompanying plans and estimate illustrate the modified proposals.

3. They are as follows :—

(1) General plan No. 68 of 10th August 1893.
(2) Section of ovoid sewers No. 69 of 10th August 1893.
(3 to 8) Sections of pipe sewers No. 70 of 10th August 1893 to No. 75 of 10th August 1893, both inclusive.
(9) Estimate marked $\frac{S. A.}{39713}$.

4. The principal modifications are as follows :—(*a*) The raising of the ovoid sewer to improve the connection between it and the main sewer while retaining the same gradient ; (*b*) the abolition of the 15″ pipe sewer in favour of a 12″ pipe sewer ; (*c*) a general improvement in the gradients of the pipe sewers ; (*d*) the avoidance of all sudden drops in pipe sewers at points of connection ; (*e*) the provision of a flat pipe at the mouth of every pipe entering a man-

hole ; (*f*) the abolition of all lamp-holes in favour of manholes ; (*g*) the adoption of rectangular manholes of the new design on all pipe sewers ; and (*h*) the provision of vent-shafts of the new pattern.

5. These modifications have necessitated the preparation of entirely new plans and sections throughout.

6. I have been able to carry out these manifest improvements without any increase in the estimate, but, on the contrary, with a small decrease.

7. This has been effected by a saving in the excavation consequent, amongst other things, upon the higher level of the ovoid sewer by a saving in the cost of flushing tanks (the quantities having been now taken out in detail, while the tanks were previously estimated at so much each) by the substitution of the 12″ stoneware pipes and junctions for 15″ pipes and junctions, and by reducing the rates for various portions of the vent-shafts in accordance with the reduced rates which we have recently obtained for the supply of the same.

8. It will be seen that the cost of the present proposals is estimated at Rs. 3,47,464, including a provision of 15 per cent. for contingencies and supervision.—I have, &c., JAMES W. SMITH, M.I.C.E., Special Drainage Engineer.

No. 5771. *Resolved* : " That letter No. 12216, dated 13th instant, from the Commissioner, be forwarded to the Corporation with reference to the Standing Committee's resolution No. 5525 of the 13th idem, and with a recommendation that sanction be given (1) to the immediate carrying out of the sewerage of the Umarkhari Drainage District at the estimated cost of Rs. 3,47,464, including 15 per cent. for contingencies, and (2) to the payment thereof out of surplus and other available loan fund balances pending the raising of the loan."

No. 5772. *Resolved* : " That the following be *recorded* :—Letter No. 12290, dated 13th instant, from the Commissioner, reporting that he has sanctioned the purchase of stoneware pipes as per statement submitted from Messrs. Richardson & Cruddas in continuation of their contract for the supply of such pipes in connection with the sewerage of Connaught and Sussex Roads, at a cost of Rs. 4,470·070."

No. 5773. *Resolved* : " That the Corporation be recommended to sanction the grant of Rs. 304 from surplus cash balance to meet the cost of extra printing charges (Corporation and Standing Committee's establishment) incurred by order of the Corporation and the Committee, *viz.*, correspondence regarding (1) the squatting of

shoe-dealers, (2) the contract for the supply of stoneware pipes for Colaba drainage, (3) draft By-laws framed under Section 461 of the Act, and (4) ditto papers relating to the criticism of Government on the account system of the Municipality."

In accordance with notice it was—

Proposed by the Hon'ble Mr. Javerilal Umiashanker Yajnik—

"That the Municipal Commissioner be requested to furnish information on the following points bearing on the subject of the special charges made under section 172 of the Municipal Act for halalkhor service rendered from the 1st October 1892 to 31st March 1893 to hotels, clubs, and other large premises :— No. 5774.

"(1) List of properties to which special halalkor service has been charged and the amount charged to each property.

"(2) Detailed items of each special charge on each property with reference to the cost or probable cost of the collection, removal, and disposal by the agency of Municipal halalkors of excrementitious and polluted matter from the property.

"(3) What proportion does the charge for the special service bear to the rateable value of each property ?

"(4) Where any increase has been made during the above period to the special charge for such service, the date from which such increase was made and the amount of increase in each case.

"(5) Is such increased charge for special halalkor service in the case of large premises as mill properties based (1) on the number of men employed, or (2) on the number of privies in each mill, or (3) on the cost of matter collected, removed, and disposed of ? In the last case (3), how is the quantity of matter ascertained ?

"(6) Who is bound to supply water for flushing purposes in the case of mill or other properties—the Municipality or the owners ? and

"(7) Where water for flushing purposes is supplied by owners, is any concession made in the charge for special halalkhor service on account of such supply ? If not, why not ?"

The motion was seconded by Bhalchandra K. Bhatawadekar, Esq., and

Carried.

Resolved : "That the following be *recorded* :—Memo-
No. 5775. randum No. 12184, dated 12th instant, from the Commissioner, reporting, with reference to the resolution of the Standing Committee No. 4484, dated 3rd October 1888, the transfer, on the 7th instant, of Rs. 1,00,000 from the surplus cash deposit account to the Municipal General Fund pass book."*

Copies of the Administration Report of the Municipality for 1892-93, received from the Commissioner this day, were distributed to the Committee.

Resolved : "That the consideration of the Commis-
No. 5776. sioner's Administration Report for 1892-93 be postponed until the next meeting and that in the meantime draft "review" of the same be prepared and circulated to members."

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 17th September 1893.

Resolved : "That the following be *recorded* :—Memo-
No. 5777. randum No. 12512, dated this day, from the Commissioner, forwarding statement showing that no house or portion of house fell during the month of August 1893."

Resolved : "That the following be forwarded to the Com-
No. 5778. missioner for favour of remarks :—Letter, dated this day, from Mr. Mahomed Ebrahim and others on the subject of fees charged for the occupancy of roads during certain religious ceremonies."

Resolved : "That the following be forwarded to the
No. 5779. Commissioner for disposal and that the applicant be informed that appeals against assessment can be made to the Court of Small Causes :—Letter dated this day, from Mr. Mahomed Haji Dawood, complaining of the assessment of his property No. 4149, Street No. 42, Nowroji Hill, and the issue of a distress warrant against him for non-payment of rates."

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* The Chief Accountant reports to the Commissioner that the balance of the above account, after effecting the transfer, is as under :—

In 5 per cent. Municipal debentures for	Rs.	22,91,000 =	Rs.	22,91,000 0 0
„ 4 per cent. do. do.	„	24,000 =	„	24,000 0 0
„ 4 per cent. Government Paper for	„	3,33,000 =	„	3,31,286 9 0
Cash	„			5,880 8 8
		Total Rs....		26,52,167 1 8

† *See* Appendix **B**.

BOMBAY, *27th September* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, ESQ., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJEE, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

On the question of the signing of the minutes, the Hon'ble Mr. Javerilal U. Yajnik said that, as the Commissioner had agreed to have the returns prepared from 1st January 1893 to 30th June 1893, instead of from 1st October 1892 to 31st March last, an entry might, with the consent of the Chairman, be made on the minutes of to-day's meeting.

The Chairman directed that such entry be made on the minutes of this day's meeting.

The minutes of the 20th instant were then signed.

No 6043. The seal of the Corporation was affixed to deed of agreement between Mr. Ismail Haji Isak and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property situated at Nos. 181, 183, 185 and 187, Chinch Bunder, and Kambekar Street, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed and at the rate of Rs. 30 per square yard for any land shown on the plan, to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition.

No. 6044. The seal was also affixed to similar agreement with Shri Girdharji Maharaj Shri Govindraji Maharaj Tikait in respect of premises situate at No. 92-94, Kika Street ; the terms and rate in this case being the same.

No. 6045. The seal was also affixed to deed of contract with Messrs. Jivanji Dhanjibhai & Co. for the construction of Tansa Road from Dadar Road, opposite Parel Convent, to Matunga.

The seal was also affixed to debenture No. 21103 for Rs. 500 of the 5th instalment of the Tansa loan to be issued for a currency of 50 years in lieu of the original debenture issued for a currency of 40 years.

Resolved : " That, as applied by the Commissioner, in his memorandum No. 12962, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 6046.

Resolved : " That, as applied for by the Commissioner, in his letter No. 12825, dated 25th instant, sanction be given to the acceptance by him of the tender of Messrs. John Fleming & Co. for the supply of stoneware pipes, &c., required for the use of the Drainage Department during the current year, at schedule rates, aggregating Rs. 15,417·068. The amount to be met out of the grant of Rs. 15,802 sanctioned by the Corporation."

No. 6047.

Resolved : " That, as applied for by the Commissioner in his letter No. 12811, dated 25th instant, the Committee approve, under section 169 (*b*) of the Municipal Act, of the following compounded water rate being charged to Government for water supplied to plots of land in Wellington lines actually occupied, *viz.*, for each large plot Rs. 2 a month, for each small plot Re. 1 a month.

No. 6048.

" That these charges be subject to modification, should they from metre readings prove to be insufficient."

The following item was *withdrawn*, the question being one entirely within the jurisdiction of the Corporation.

Letter No. 12806, dated 25th instant, from the Commissioner, requesting sanction to the offering for sale of the old engines, boilers, &c., at Love Grove, and also to the sale of the engine and boiler, &c., of the old Carnac Pumping Station.

Proposed by the Hon'ble Mr. R. G. Oxenham, seconded by Hurkisondas Narrotumdas, Esq.—

" That, as applied for by the Commissioner in his letter No. 12556, dated 20th instant, and with reference to the resolution of the Committee, No. 3817, dated 19th July last, sanctioning the filing of a suit against Mr. Hormasji Sorabji for damages caused by his carriage coming into collision with a lamp column, sanction be now given to the abandonment of the filing of such suit, as the Municipal Solicitors advice that it would not be successful unless there was evidence of negligence or fault on the part of the driver."

No. 6050.

Carried.

Resolved : "That, with reference to the Commissioner's
No. 6051. letter No. 12559, dated 20th instant, the Standing Committee approve, under section 19 (6) of the Municipal Act, of a fee of Re. 1 being charged for each copy of the preliminary Election Roll supplied to the public."

Resolved : "That the following be *recorded* :—Letter
No. 6052. No. 12684, dated 23rd instant, from the Commissioner, reporting, with reference to the Corporation's resolution No. 1132, dated 14th May last, and as required by section 69 (*d*) of the Municipal Act, that rubble stone of the value of Rs. 626 was purchased from Mr. Kharsedji Sorabji Jassawala for constructing the rough ramp on the Colaba foreshore to prevent the access of the tide."

Resolved : "That, as applied for by the Commissioner,
No. 6053. in his letter No. 12683, dated 23rd instant, and with reference to their resolution No. 2930, dated 15th June 1891, the Corporation be recommended to confirm the amount and nature of the security to be furnished by the Superintending Engineer, Love Grove, at Rs. 2,500 and that of the Head Foreman, Municipal Workshops, at Rs. 1,500.

"That the securities either be deposit of cash or public securities, or surety bonds from holders of immoveable property in Bombay, or the guarantee of a Company or Association existing for the purpose of giving such guarantees."

In accordance with notice, it was proposed by Bhalchandra K. Bhatawadekar, Esq.—

"That the Commissioner be requested to report to the Standing Committee whether a complete system of house connections is included in the sewerage of the Umbharkadi sewage district. If this is included, he is requested to state what system is recommended ; but if it is not included, the recommendation of the Standing Committee be postponed, being sent to the Corporation until the question of its inclusion is discussed and decided by the Standing Committee."

After the Commissioner had stated that the estimates for house connections are not included and that they will be placed before the Committee as soon as the House Connections Committee have reported, Mr. Bhalchandra K. Bhatawadekar *withdrew* his motion.

Resolved : "That the following be laid on the table :—

No. 6055. Letter, dated 20th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of August last, and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statement of their scrutiny of accounts."

Resolved : "That the following be *recorded* :—

No. 6056. Memorandum No. 12739, dated 25th instant, from the Commissioner, reporting, with reference to the resolution of the Standing Committee, No. 4484, dated 3rd October 1888, the following transfer to the General Fund pass book on the 12th instant:—(*a*) Rs. 2,498-14-0 from the 44 Lakhs Sanitary Works Loan deposit account No. 1; (*b*) Rs. 1,997-8-0 from the Miscellaneous Works Loan of 1888-9 deposit account; (*c*) Rs. 5,880-8-8 from the Surplus Cash deposit account."*

Resolved : "That the following be forwarded to the

No. 6057. Commissioner for favour of remarks :—Petition addressed to the Corporation and the Standing Committee by Ramjanbhai Babunbhai, requesting that some allowance or compensation be allowed to him in connection with his contract for the supply of bullocks and drivers."

The following return was read and *recorded* :—

No. 6058. Return of fire at Arthur Road (Tardeo), forwarded with the Commissioner's memorandum No. 12467, dated 19th September 1893.†

The following statement‡ was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 24th September 1893.

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* The Chief Accountant reports to the Commissioner that the balance of the above account, after effecting the transfer, is as under :—

(*a*) In 4 per cent. Government Paper for	Rs. 4,74,000 =	Rs. 4,63,914	14	5
(*b*) „ „ „ „	„ 1,00,000 =	„ 99,625	0	0
(*c*) „ 5 per cent. Municipal Debenture for	„ 22,91,000 =	„ 22,91,000	0	0
„ 4 per cent. „ „	„ 24,000 =	„ 24,000	0	0
„ 4 per cent. Government Paper for	„ 3,33,000 =	„ 3,31,286	9	0

† *See* Appendix **C**.

‡ *See* Appendix **B**.

The draft "Review" of the Commissioner's Administration Report for 1892-93, which had previously been circulated, was considered para. by para.

Para. 4, line 5.—The word "although" between the word "and" and the word "up" was struck out.

All the words following the word "charges" in line 8 were omitted.

Para. 5.—The word "local" was inserted before the word "legislature."

Para. 19.—After the words "The old machinery has been," the word "superseded" was inserted in place of the word "replaced." The last sentence of the para. as follows was omitted :—"The end of the open main drain at Arthur Road crossing is being bricked over."

In the next para., the word "great" was inserted in place of the word "large" before the word "improvement."

Para. 20.—The sentence as to the presence of leeches was struck out. The word "one" was inserted in place of the word "some" after "Matunga."

Para. 23.—The words "the Health Officer reports that" were inserted before the word "with" in the first line. In line 4, the words "In his opinion" were inserted in place of the words "In the opinion of the Health Officer." In line 14 the words "The Health Officer points out that" were inserted before the word "however."

Para. 24, line 1.—The words "Dr. Weir remarks" were inserted before the word "where." In line 7, the word "he" was inserted in place of the words "the Health Officer." In line 17, the words "the Corporation have directed" were inserted in place of the words "the Standing Committee are of opinion." In the following line the word "should" was struck out.

Page 10, line 1.—The words "from hydrophobia there were 6 deaths" were inserted after the word "average."

Para. 26, line 1.—The word "no" was inserted in place of the words "but little." In line 4, the word "only" after "was" was struck out.

Para. 27, line 6.—The words "per diem" before the word "more" were struck out. In line 8, the word "daily" before the word "were" was struck out.

Para. 28—On the motion of Mr. Roughton it was agreed that the following paragraph be inserted after the word "Corporation" :—

"The decrease from deaths by leprosy referred to in para. 25 may, the Standing Committee think, be in great measure attributed to the establishment of the asylum and the great care and attention bestowed on its unfortunate inmates."

In line 7, the words "and of" were inserted in place of the word "with."

Para. 30.—Proposed by Mr. Roughton, seconded by Mr. Viegas—"That all the words from 'it is believed' to the end of the para. be omitted, and that the following words be inserted in place thereof" :—

"The Standing Committee desire to call attention to the great decrease in the aggreggate number of pupils in the unaided primary schools of the City on the assumption that the returns of the numbers present in the various schools in the City are correct."

Amendment proposed by Mr. Kaikhosro N. Kabraji—

"That the words beginning from 'it is believed' to the words 'in the City' be retained, and Mr. Roughton's amendment substituted for the rest of the paragraph with the word 'unaided' added before the word 'schools.'"

The amendment was not seconded and the original motion was *carried.*

No. 6059. The "Review" as thus amended was adopted as follows :—

Review by the Standing Committee of the Administration Report of the Municipal Commissioner for the City of Bombay for the year 1892-93.

1. During the course of the year there were sixty-two meetings of the Corporation and twenty-seven Committee meetings ; fifty-two meetings of the Standing Committee and six meetings of sub-committees thereof, with one hundred and twenty-six attendances for cheque-signing and forty-nine for the audit of the weekly statements of accounts.

2. The new offices were occupied from the 14th January last, but some minor works thereat are still in hand.

3. The new Building By-Laws were confirmed by Government on 3rd August 1892 and are now in operation; and before the close of the year like confirmation was given to the Regulations relating to the Retiring or Pension Fund for Municipal officers and servants.

4. Consequent on the projected increase in the City Police, provision was made in the Budget to the extent of Rs. 4,00,000 as against the Rs. 4,50,000 originally demanded by Government, and eventually the sum was fixed at Rs. 3,63,345, and up to 31st March last the reply had not been received from the Secretary of State for India to the memorial from the Corporation praying for a reduction in the charges.

5. The claim of the Corporation to be allowed to deposit at their discretion surplus moneys instead of being compelled to keep the same in the Bank of Bombay even without interest, referred to in the last "Review," has now been sanctioned by the local Legislature.

6. As to the question of the existing method of keeping the Municipal accounts, the correspondence with Government was still proceeding at the end of the year.

7. One of the most important of recent financial transactions was the alteration in the terms of the repayment of the Vehar debt and Tansa Water Works loan and the conversion of the Tulsi Water Works consolidated loan of 4½ per cent. into 4 per cent, whereby there is an annual saving of Rs. 2,29,200 in the charges for interest and sinking fund. It is satisfactory to add that the 4 per cent. loan was easily raised in the local market with a net profit to the Municipality of about Rs. 25,000.

8. The important question of the disposal of town sweepings outside the limits of the Island has still to be settled, but the lease of a large plot of marshy land at Chimboor, which it is proposed to fill in with sweepings, has been secured from Government.

9. As yet no decision has been come to relative to the provision of burying ground for Mahomedans and the Beni-Israel, though such land is urgently required.

10. *Income and Expenditure.*—The opening workable balance, including recoverable advances, but excluding deposits and minor items of adjustments, was Rs. 29,05,655-0-10, or Rs. 13,05,655-0-10 in excess of the Budget Estimate. Deducting from this balance Rs. 5,44,727-14-1, the unex-

pended balance of lapsed grants for 1891-2 renewed in 1892-93, and reserving Rs. 2,50,000 temporarily paid out of surplus cash balance for improvements to Victoria Gardens, as sanctioned by the Corporation in January and August 1890, there remained a surplus of Rs. 5,00,000, which, not having been appropriated during the year, formed part of the opening balance of 1893-4. The revenue exceeded that of the previous year by Rs. 5,80,483-3-9 and the only exception where there was a falling off from the estimate, was that of Rs. 464-6-11 under the heads of interest on sinking fund and Municipal Buildings fire insurance fund investments, and Tramway rent. The total revenue was Rs. 66,65,186-15-11, or Rs. 7,14,869-15-11 above the estimate. The greater portion of this increase was derived as follows :—Property Taxes, Rs. 3,05,562-6-10 (of which about Rs. 2,60,000 were recoveries of arrears due in former years); Wheel Tax and Tolls, Rs. 28,593-6-0; Town Duties, Rs. 73,928-3-0; Licenses, Rs. 8,626-1-0 ; Tobacco Duty, Rs. 6,703-1-1; Markets, Rs. 23,535-2-1 ; Miscellaneous Fines, Rs. 10,541-10-6; Miscellaneous Receipts, Rs. 16,725-7-8; Interest and Profit on Investments, Rs. 2,22,696-4-1; Profit on sale of stores, Rs. 8,701-10-11; and Workshop Receipts Rs. 2,817-4-1. It would appear, therefore, that Rs. 5,28,258-10-11 out of the total increase over estimate, being on account of large arrears of rates and of interest and profits on investments, the actual increase on items of ordinary revenue was Rs. 1,86,611-5-0 only. The circumstances under which these large profits from interest and investments accrued are explained in detail at page 54 of the Chief Accountant's Report, but it should be added that Rs. 1,90,000 out of the excess realizations were anticipated and taken credit for in the budget estimates for the current year.

11. The sanctioned expenditure for the year, including renewal of lapsed grants, was Rs. 73,06,829-3-6, of which Rs. 65,45,511-14-5 only was spent, leaving unexpended Rs. 7,61,317-5-1. Of this, Rs. 3,55,295-10-11 was renewed for payment of liabilities already incurred and for the completion of works, leaving a net saving of Rs. 4,06,021-10-2. The heads under which these savings occurred and the net amounts thereof were as under :—Engineer's Department, Rs. 1,07,625; New Works, Rs. 37,432 ; Health Department, Rs.1,26,855; Police, Rs. 36,703 ; Hospitals, Rs. 12,331;

Pensions and Gratuities, &c., Rs. 6,178; Debt Charges, Rs. 26,665; Fire Brigade, Rs. 31,693; General Superintendence, Rs. 4,416; Assessment and Collection, Rs. 7,929; Gardens, Rs. 4,290; Education, Rs. 3,841; and Insurance fund interest investment, Rs. 64. The causes for these savings are explained at pages 12, 13, and 64 to 72.

12. Compared with the actuals of the previous year, the expenditure was greater by Rs. 8,74,825-13-8, the principal increases being Fire Brigade, Rs. 59,022; Public Work, ordinary, Rs. 47,448; New Works, Rs. 39,346; Municipal Debt, Rs. 5,59,828; and Police, Rs. 1,05,340.

13. The expenditure on account of Loan Works was Rs. 26,65,681-1-0, which, added to the expenditure of Rs. 65,45,511-14-5 from the Municipal Fund proper, gave a total expenditure of Rs. 92,11,192-15-5.

14. *Assets and Liabilities.*—In para. 46 of his Report the Commissioner gives a statement of the assets and liabilities of the Corporation on 31st March 1893, in which the total assets are taken at Rs. 5,28,57,059-1-8 and the total liabilities at Rupees 3,64,18,126-13-3, the value of assets over liabilities being thus shown at Rs. 1,64,38,932-4-5, which the Standing Committee find, is an increase of Rs. 6,93,267-15-10 on the figures for the previous year. The assets are as per margin.

	Rs. a. p.	Rs. a. p.
I.—Balances and Investments—		
(1) Cash balance in Office and Bank Treasuries	2,12,572 1 4	
(2) Invested surplus cash balance ..	28,00,700 5 0	
(3) Do. Loan Fund balances ..	17,46,552 4 3	
(4) Do. Sinking fund	6,14,554 15 9	
(5) Do. Municipal Buildings fire insurance and Renewal of Water Mains funds	1,12,774 0 5	
(6) Contractors, &c, deposits in Government and other Securities	2,39,600 0 0	
		57,26,753 10 0
II.—Advances, Departmental, and to Contractors ..		21,745 8 0
III.—Municipal Property—		
(1) Land and Buildings, Tulsi, Vehar, Pawai, and Tansa, &c., Water Works ..	3,66,17,439 14 6	
(2) Roads, Bridges and other improvement works..	86,63,080 0 9	
(3) Stock	18,28,040 0 5	
		4,71,08,559 15 8
Total Assets ..		5,28,57,059 1 8

The liabilities are :

By various Loans	3,59,15,897	11	6
Deposits by Contractors, &c.	4,84,292	0	6
Adjustment items (reserved for Loan Works Establishment).	17,987	1	3
Total Liabilities ... Rs.	3,64,18,126	13	3

15. *Registration and Valuation of Property.*—At the close of the year the number of properties on the Assessment Book was 51,344 (as against 51,135 on 31st March 1892). Of the total, 39,353 were assessed to the General Tax, 4,300 were exempted or compounded for on special terms, and 7,691 were small plots of unproductive land for which no bills were issued. The recorded gross valuation was Rs. 2,64,03,982 (a decrease of Rs. 21,76,941 on the figures for 31st March 1892). The valuation chargeable with the General Tax was Rs. 2,40,19,171 ;-ditto not chargeable, Rs. 23,66,995 ; ditto for which no General Tax bills were issued, Rs. 17,816. The above falling off was due to the revision of the valuation of Government properties and properties owned by the Port Trust Estate, but for which, there would have been an actual increase in the valuation of Rs. 5,86,611. Notwithstanding this decrease, the enhanced amount of the general tax paid by the Secretary of State amounts to Rs. 55,839. The number of buildings demolished was 428, while 540 new buildings were erected and 199 existing properties were enlarged.

16. *Outstanding Balances of the Property taxes.*—It is satisfactory to note that, although at the beginning of the year the outstanding balance on account of Property Taxes was Rs. 4,53,728, the amount was, by the middle of July last, reduced to Rs. 40,447.

17. *Assessment Appeals.*—The number of appeals to the Small Cause Court against valuation was again satisfactorily small, the total being 90, of which 19 were dismissed, 19 allowed, 39 settled by consent, and 13 remained undisposed of.

18. *The Revenue Audit* branch report that the books and balances of all the ward clerks were examined at the end of each quarter and the bills checked, whilst the assessment books of the head office were examined with a view to ascertain that no property liable to taxation had been omitted.

19. *Drainage, &c.*—The sewerage of Colaba on the Shone System at a cost of Rs. 7,09,608 was sanctioned by the Corporation just before the close of the financial year and is being proceeded with. In the Byculla portion of Agripada District the work of house connections is practically completed, but in the First Drainage Section, comprising the most densely populated portions of the City,

the work has been suspended, pending the results of the various experiments that are being made under the supervision of a committee of the Corporation with different kinds of fittings. A pipe sewer from Parel village *viâ* Government House Road to the main sewer at Lall Bagh was laid, and branch sewers for the village and metal vent-shafts are under construction. Two masonry shafts for improving the ventilation of the Queen's Road were put up and additional manholes provided. A new night-soil depôt in DeLisle Road was completed, and other minor works were carried out. The Carnac Bunder night-soil depôt was maintained in good order, but from the 8th March pumping there was discontinued, as sea-water is not now used for flushing, the necessary water being drawn from the Tansa main. The old engines and pumps at Love Grove Station broke down occasionally and were unable to cope with the large addition to the volume of sewage, consequent on the great increase of the flow since the opening of the Tansa Water Works. The old machinery has been superseded by four sets of Worthington's triple expansion engines, sewage pumps, and Babcock's boilers.

A large quantity of silt was passed through the sewers to the sea, and it is reported that the state of the sewers showed a great improvement over that of the previous year.

Additional latrines and urinals were erected, and others of these much-needed places of accommodation are in course of construction. Some important observations of the Health Officer on the subject of drainage are referred to in paras. 23 and 24 of this Review.

20. *Water-supply.*—By the introduction of the Tansa supply, the daily quantity of water has been increased from 16½ to 29 millions of gallons. The rainfall at Vehar in the year under notice was the heaviest on record since 1861, namely, 129·38 inches; at Tansa it was 114·18; at Tulsi, 144·15; and at Pawai, 122·27. All these lakes overflowed, and it is estimated that 30,000,000,000 gallons passed over the waste weir at Tansa. From that lake the average daily draw-off was 20,500,000 gallons. The offer of rewards for their capture only resulted in the taking of two crocodiles and eighteen of their eggs. The repairs to the John Hay Grant Reservoir were continued, and the leakage was much diminished. In consequence of corrosion

from contact with salt earth of the 32″ Vehar main between Dadar and Matunga, one of the pipes had to be replaced, whilst a portion of the pipe embankment from Kurla to Sion was repaired. The number of water connections was increased from 18,113 to 18,486. This exhibits a lower average of increase than formerly, but as the number of complaints of short supply, and of applications for second or larger connections has diminished, the inference is that the reason for this falling off in the average is, that the Tansa supply has greatly improved the water service.

21. *Buildings, Roads, Overbridges, and Lighting.*—Applications to build or rebuild numbered 991, of which 873 were sanctioned. There were 70 buildings or parts of buildings which fell, in 5 of which 17 persons were injured and 1 was killed. Land for the construction of new roads in the Agripada, Dadar, Mahim, and Matunga districts has been purchased, on which the total expenditure to the end of the year was Rs. 17,41,565. The roadway over the Tansa main from Dadar to Matunga is now being made, and the Connaught and Sussex Roads were approaching completion at the end of March last. The construction of the long-deferred overbridge in Falkland Road will soon be proceeded with. The Corporation have accepted the terms laid down by Government in its Resolution of 9th March 1893, and the land required in the matter is now being acquired. The plans in connection with the overbridge near Wari Bunder await the final approval of Government. Regarding the question of lighting, it appears there were 3,580 gas lamps in the streets, and that, with a view to improving the illuminating power of the gas, experiments are being made with Welsback's incandescent burners. The number of kerosine lamps is 1,448.

22. *Fire Brigade.*—The Brigade is now fully equipped with engines and appliances of the latest design, and is well disciplined and efficient. During the twelve months there were 137 fires, the damage done by which is entered at Rs. 3,18,599, of which Rs. 87,000 was on account of hay stacks.

23. *Public Health and Vital Statistics.*—The Health Officer reports that with a higher temperature and a higher dew-point there was a higher mortality, and with this season unfavourable to health, there were other conditions within the city itself tending to depress the vitality of the

population. In his opinion the most serious of all these is the constant saturation of the ground by the water consumed by the people, and the enormous accumulation of subsoil water consequent on the absence of drainage, and hence that which occurs in other places where the land is wet and marshy, occurs in Bombay, namely, the poisoning of life from malarial fever ; for, while one of the first principles of sanitation is that the water brought into a city shall be carried away again promptly, here, for the greater part, the soil becomes water-logged. The Health Officer points out that, however powerful the pumps at the drainage outlets may be, the water will remain in the soil until the undrained and ill-drained localities are properly connected with the means of outlet.

24. There are districts, Dr. Weir remarks, where the daily water-supply is equal to sixty gallons per head of the population, though there are no drains for carrying off subsoil water or drainage, and in the new undrained districts the inhabitants may be said to be living among sewage. Whilst expressing the earnest hope that the question of completing the sewerage and surface drainage may be dealt with without delay, he suggests that the quantity of water supplied per head per diem should be reduced to twenty gallons in ill-drained districts, and to fifteen gallons in those which are wholly undrained. Overcrowding and want of ventilation were among the causes most predisposing to disease, and he strongly recommends the amendment of the Municipal Act so far as it relates to building regulations. Regarding his suggestion that an engine should be constantly employed for flushing out gullies in the most crowded parts of the city, the Corporation have directed that provision be made accordingly in the Budget estimates for next year.

25. The Standing Committee have again to express their regret at the high mortality, the deaths from all causes, except still-born, having numbered 26,518, equivalent to a death-rate of 32·26 per 1,000 on the figures of the Census of 1891, in which year the percentage was 29·01, whilst the average of the last five years was 28·63. In the past year there was an increase in all the death-causes except in those relating to the nervous system, in which there was a slight decrease. The chief increases in mortality were from fevers, small-pox, phthisis, diseases of the respiratory

system, dysentery, diarrhœa, cholera, and accidental deaths. The return of deaths from all causes is as follows :—

Causes of Death.	Number of Deaths.	Rate per 1,000 of Population.	Remarks.
Small-pox	541	·66	
Measles	710	·86	
Fever	7,751	9·43	
Cholera	169	·21	
Phthisis	3,538	4·30	
Diseases of the nervous system	2,330	2·83	
Ditto respiratory system	4,601	5·60	
Diarrhœa	1,172	1·43	
Dysentery	651	·79	
Accidents	392	·48	
All other causes, except still-born	4,663	5·67	
Total...	26,518	32·26	

Taking the deaths at different ages, it is found that by far the highest mortality was that among children of one year, 7,763, equal to a death-rate of 306·94 per mille. The lowest rate was among children of from 10 to 14, 6·02. The highest death-rate was among the small community of Negro-Africans, 105 having died out of a population of 146, equal to a mortality of 719·17 per mille ; then came Hindu low-castes, 51·38; Jains, 46·42; Mussulmans, 41·25; Bhattias, 39·79 ; Lingaets, 39·54 ; Buddhists, 31·57 ; Hindus of other castes, 28·13; Brahmins, 27·77; Native Christians, 27·16; Jews, 26·88; Parsees, 23·78; Eurasians, 21·24; and Europeans, 20·10. The ratio of mortality according to localities was as under : Parel, 47·59 ; Kamathipura, 46·15 ; 1st Nagpada, 40·15 ; and the sections of lowest mortality were the Water Division, 2·66 ; Fort, South, 8·60; Mahalakshmi, 15·34 ; Worli, 17·29 ; Walkeshwar, 17·32 ; Chowpati, 19·11 ; Esplanade, 19·37 ; and Sion, 20·56.

The deaths from cholera were 5 more than in the previous year, but less than the average ; from small-pox the deaths were 311 more than the average. From measles there were 96 more deaths than in 1891, and from fever 914. From leprosy there were 45 deaths, or 25 less than the average. From hydrophobia there were 6 deaths. Of the dead, 17,879 were buried, 8,857 burned, and 1,209 carried to the Towers of Silence.

26. *Birth Registration.*—No improvement is observable in the number of births registered, as the total—15,485

living and 1,427 still-born—was 33 less than in 1891; of the living, 8,045 were males and 7,440 females.

27. *Work of the Health Department and Cost thereof.*—The average number of work-people and carts employed daily were 4,272 men and women, 1,046 scavengering and drain carts and 203 night-soil and cesspool carts; of garbage and kutchra collected and removed, there were 318,194 tons, or 871 tons a day, or 21 tons more than in the previous year; 140,480 tons of night-soil, or more than 384 tons a day, were also collected and removed. Upwards of 182 miles of covered drains were opened and cleaned. The total expenditure on the department was Rs. 11,75,517-1-8 including cost of the Vaccination Branch, but as the department earned Rs. 7,03,711-8-1 including receipts from vaccination, but deducting proportionate cost of the Assessment and Collection Department in respect of the Halalkhor Tax, the net cost to the Municipality was only Rs. 4,71,805-9-7, or about Rs. 57,356 less than in the previous year.

28. *The Leper Asylum.*—The daily average number of patients was 264½ at a monthly cost of Rs. 9-6-0 per head. Some difficulty is felt in keeping the number below 300, the maximum for which funds are contributed by Government and the Corporation. The decrease from deaths by leprosy referred to in para. 25 may, the Standing Committee think, be in great measure attributed to the establishment of the Asylum and the great care and attention bestowed on its unfortunate inmates. A sum of Rs. 19,000 was received from a benevolent Parsi lady for the construction of a separate hospital ward and of bathing places and latrines for women and children.

29. *Markets.*—The supply of fruit was plentiful, good and cheap, but vegetables were rather scarce. The meat supply was also plentiful, good and cheap. As much as 98 tons of mutton, beef, fish, corn and other articles were seized and destroyed as being unfit for human food. The total revenue from markets and slaughter-houses was Rs. 3,77,527, an increase of Rs. 13,745 over that of the previous year.

30. *Education.*—The grant for educational institutions was Rs. 87,720 including Rs. 61,220 for primary instruction. The receipts of the Joint Schools Committee were Rs. 1,23,820-4-5, of which a balance of Rs. 26,696-14-10 remained at the close of the year. The number of scholars

on the rolls on the 31st March last was 6,392. The sanitary condition of some of the school buildings still leaves much to be desired, but the Joint Schools Committee express the hope that the new school building over the Bhuleshwar Market will be a model for other school-houses. A new school for girls was opened in Thakurdwar Street, which has 70 pupils on the rolls.

The Joint Schools Committee state that there was an increase of 180 pupils in the Municipal schools and of 464 pupils in the schools which are aided from the School Fund under the Grant-in-Aid Code. Since the transfer of the primary schools to the Municipality, the Joint Schools Committee have registered altogether 13 new schools for receiving grants-in-aid under chapters V and VI of the Code, five new schools being added to the list last year.

The Standing Committee desire to call attention to the great decrease in the aggregate number of pupils in the unaided primary schools of the City on the assumption that the returns of the numbers present in the various schools in the City are correct.

31. *Report of the Municipal Auditors.*—This is more concise than usual, and shorter by one-third than in the previous year. The report will however be found to contain what is material, the details which have been omitted merely being those already appearing in some of the departmental reports.

In accordance with the terms of section 124 (3) of the Municipal Act, the Standing Committee direct that all appendices attached to the reports of the several heads of departments, as received from the Commissioner, be circulated with his report for the information of the Corporation.

BOMBAY, *4th October* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE Esq., G.G.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. P. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; the WATER ENGINEER ; the CHIEF ACCOUNTANT ; and the SECRETARY.

The minutes of the meeting held on the 27th ultimo, were signed.

The seal of the Corporation was affixed to deed of contract with Messrs. Killick, Nixon & Co. for the supply of 300 tons of Powell's Duffryn Cardiff coal.

The seal was also affixed to the following debentures:— 1 attested duplicate of Debenture No. 2873/74 of the 35 lakhs Various Sanitary Works Loan for Rs. 1,000; 10 attested duplicates of Debentures Nos. 460, 833, 835, 837, 3630 and 14028 to 14032 of the Tansa Water Works Loan for Rs. 500 each; and 17 attested duplicates of Debentures Nos. 15121 to 15131, 15133, 15492, 15493, 15774, 17832 and 17833 of the Tansa Water Works Loan for Rs. 500 each.

No. 6304. *Resolved*: "That, as applied for by the Commissioner, in his memoranda No. 12845, dated 26th ultimo, Nos. 12935 and 12936, dated 27th idem, and Nos. 13025 and 13026, dated 28th of the same, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Bai Jaskorebai, widow of Kusturchand Pratapchand.	Building at Sheik Memon Street.
Bai Gomti Vahu	Do. at No. 138-144, Bazar Gate Street.
Messrs. Alla Oodin Jiwanji & Sons.	Do. at No. 560, Duncan Rd.
Mr. Mulji Purshotum	Do. at Dadar Koombharwada.
„ Sadoo Nahal	Do. at Forjett Street."

No. 6305. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 13518, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Read letter No. 13067, dated 28th ultimo, from the Commissioner, to the Secretary, as under :—

SIR,—With reference to the provision of Rs. 13,200 in the Budget for the current year for the renewal of 22 meat-vans, I have the honor to report that the Executive Engineer has examined some of the old meat-vans, and he is of opinion that they can be repaired at a much smaller cost so as to last for a considerable time, that is, for some years. I would, therefore, request the sanction of the Standing Committee and the Corporation to the 22 old vans being repaired at a total cost of Rs. 6,050 as estimated by the Executive Engineer, instead of incurring the expenditure for the construction of new ones as provided for in the Budget.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner,
No. 6306. in his letter No. 13067, dated 28th ultimo, the Corporation be recommended to sanction the repairing of the 22 existing meat-vans at a cost of Rs. 6,050, instead of the renewal of the same at a cost of Rs. 13,200, as provided for in the current year's Budget."

Resolved : "That, as applied for by the Commissioner,
No. 6307. in his letter No. 13004, dated 27th ultimo, the Committee approve, under section 407 (*b*) of the Municipal Act, of the sale, to Mr. Dhunjibhai Mervanji Daruwalla, for Rs. 350, of the right of collecting squatters' fees at the New Foras Road Market, from 1st October 1893 to 31st March 1894."

Resolved : "That, as applied for by the Commissioner,
No. 6308. in his letter No. 12861, dated 26th ultimo, sanction be given to the employment of a mistry, on Rs. 40 a month, to supervise the construction of chawl for the Health Department biggaries at Bori Bunder, instead of a surveyor on Rs. 55 a month as provided in the current year's Budget."

Resolved : "That, as applied for by the Commissioner, in
No. 6309. his letter No. 13230, dated 2nd instant, sanction be given to an allowance of annas two per head per day to sepoys and lascars of the Engineer's Department when sent on duty to Salsette and Tansa*. The amount to be met from the Water Works Contingent grant."

Resolved : "That the following be *recorded* :—Letter
No. 6310. No. 13231, dated 2nd instant, from the Commissioner, reporting, as required by section 92 (*a*) of the Municipal Act, that he has allowed one Mr. Luxmon Raghoo to cut grass from the ground lately purchased from Bai Motlibai, in the Agripada district, at the rate of Rs. 100 per mensem on a sufferance tenure terminable at 24 hours' notice."

Resolved : "That, as applied for by the Commissioner,
No. 6311. in his memorandum No. 13229, dated 2nd instant, sanction be given to the purchase of 1,000 cases of kerosine oil, 125° proof test, from Messrs. Heptoola Sheik Adam & Co., at Rs. 3-4-0 per case.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for further tenders, as the rates recently tendered by other dealers were excessive."

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* These words were added by the Committee at their meeting held on 15th November 1893 (Resolution No. 7871).

Resolved: "That the following be *recorded*:—Memorandum No. 13203, dated 2nd instant, from the Commissioner, reporting that a further lot of 4 per cent. Government Paper for Rs. 1,00,000, belonging to the surplus cash deposit account, was sold, on the 28th ultimo, at 105 per cent. against the cost price of 99½ per cent."

No. 6312.

Read memorandum No. 12989, dated 27th ultimo, from the Commissioner, to the Secretary, as under :—

Forwarded to the Standing Committee.

The Commissioner has no comments to make except on the Executive Engineer's paras. 4 and 5, as all the facts are fully detailed. With reference to them Pawai was high, Bhandarwada was low, and Pawai water was, in fact, supplied to that reservoir, as well as Tansa water to the fullest extent possible.—H. A. ACWORTH, Commissioner.

No. $\frac{W}{4254}$ OF 1893-94.

BOMBAY, 13*th September* 1893.

TO THE MUNICIPAL COMMISSIONER,

Through the Executive Engineer.

SIR,—I have the honour to report that at about 4 P.M., on 30th ultimo, a 42" flanged pipe failed in the Vehar outlet tunnel. This liberated a stream of water which may be roughly calculated at 50 millions of gallons per day which passed down the tunnel and then cut for itself a deep ravine into the River Goper below. Fortunately this rush of water has not resulted in any very serious damage to the sluice-house or bridge, the foundation in some places being slightly undermined and the damage has been made good by the building of masonry and filling in with concrete.

2. The lowering of the plug inside the tower so as to shut off the water from the broken section was commenced about 6-30 P.M. in my presence. The winch was carefully handled, but the rush of water was so great that when the plug came to feel the full force of it, the chain by which it was suspended broke, the plug went to the bottom, and not entering its seat truly, the rush of water continued.

3. The force of the current made it impracticable to do anything more inside the tower or in the tunnel, and steps were therefore taken to lift the strainers outside the tower and to fix plugs in their places so as to prevent water entering the tower. The services of a diver from the Port Trust was obtained through the kind and prompt attention of the Port Trust Engineers, and of another diver, Mr. Haji Hasan, who is in private practice. The strainers were removed during Thursday and the outer plugs were lowered, but did not at first fit truly. The diver's kit having

arrived on the evening of Thursday, they were sent down to examine the place which could only be done imperfectly and with great difficulty owing to the velocity of water rushing into the tower.

4. On Friday, the 1st instant, the higher of the two outside plugs was got into place and the volume of water was thereby somewhat abated, and danger of any further damage to the sluice-house was averted. On Saturday attempts were made to get the lower of the two plugs, which was about 25 feet below the water, into its place, and these were partially successful. In the meantime hooks had been prepared with the object of catching the central plug and endeavour to put it into place. On the first occasion the effort was partly successful, and this enabled the lower of the outer plugs to be partly caulked, still further reducing the rush of water, and on a further attempt the central plug was got almost truly into place and the flow of water in the tunnel was practically stopped at about 6 o'clock on Saturday evening. The work of repair was commenced on Sunday morning, the broken pipe and the one next to it which had been in a damaged condition for many years, were removed and replaced, and the water turned into the main again on Tuesday morning. The main was tested during Tuesday and found to be in satisfactory condition. On Wednesday morning the main was emptied so as to allow of the inspection and cleaning of the sluices at the end of the tunnel and of the proper fixing of the chain for raising the central plug. The central plug was raised, the outer plugs were partly opened and the usual supply of water was given to the City from about 9 P.M. The outer plugs were entirely removed and the strainers were replaced on Thursday, the 7th instant.

5. The length of time required to carry out the different operations of raising and lowering the strainers and plugs render it necessary that more effective arrangements should be permanently provided, so that in the event of a recurrence of an accident of this nature the repairs may be effected with promptitude and without that risk of damage occurring to other portions of the works which has attended this accident, and I shall submit, on an early day, proposals for securing these objects. I propose that the centre plug shall be secured and operated by three chains of one and that the outer plugs shall always be suspended over the outlets within the strainers so that they can be lowered at a moment's notice by gearing provided for each one.

6. Similar alterations should also be carried out at the Tulsi outlet tower, of which the arrangements are similar to those at Vehar. The outlet at Tansa is of an entirely different character, that of Pawai is already on the same lines as the new ones proposed for Vehar and Tulsi, and is also protected by sluices placed immediately outside the masonry dam, so that for the latter two lakes no further arrangements appear to be suggested by this accident at Vehar.

7. On Friday morning, the 1st instant, Pawai water was supplied by gravitation from the 24" and 32" main into Bhandarwada Reservoir and the full quantity of Tansa water was supplied to the City. The supply during the stoppage was satisfactory and very little inconvenience was caused to consumers.

8. Very great credit is due to the diver, Mr. Haji Hasan, for the intelligence and courage which he displayed on this occasion, the success of the operations being dependent upon him. On a previous occasion of a similar kind, some few years ago, he also rendered valuable service. It is very important that the arrangements should be such as not to be absolutely dependent upon such special courage as has been required on this occasion. I regret to state that Mr. Haji and a cooly were hurt on Wednesday morning by the slipping of an extra chain which was being lowered to secure the central plug. Both are recovering and are expected to be able to resume duty shortly.

9. I am not able to submit any reasons for the failure of the pipe at the time it did. It was working steadily as it had been doing for months before discharging water at fixed heads into the Vehar filters and Bhandarwada Reservoir, and the Vehar Lake was at almost the same height as it had been since the month of July. The pipe which failed is one which has been doing duty for 14 or 15 years and shows by its fracture no elements of weakness so far as I have observed ; nor can I see any ground for supposing that the somewhat weak condition of the pipe adjoining it which did not fail could have attributed to its failure. In spite of abundant margin of safety always left in cast iron structures, they do fail from time to time, and that when least expected and very frequently without there being any strong *à priori* reason therefor.

10. The Assistant Engineer, Mr. N. D. Bhada, and Inspector, Salsette, Mr. Dewoo Purdesh, were in constant attendance during the period of repairs, as was also Mr. Watson, Superintendent of Maintenance, from Friday to Monday, and the Executive Engineer visited the place daily up to Sunday when the danger was over. The nature of the accident and the different steps required for dealing with the difficulty were also explained to you on the spot on the 31st ultimo.—I have, &c., S. TOMLINSON, M. INST. C. E., Water Engineer.

No. 8553 OF 1893-4.

BOMBAY, *25th September* 1893.

To THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to forward the accompanying letter bearing No. W-4254 of the 13th instant, from the Water Engineer, and to report that a better arrangement for shutting off the water between the tower and the sluice valve outside the tunnel should be devised, and proposals for doing this will be submitted in due course.

2. It seems strange that this subject should not have attracted attention long before. Some two or three months ago, when I

had visited the lake, the present arrangement appeared to be unsafe, as an accident of a somewhat similar nature had, as I was then informed, taken place some years ago. It was my intention to bring the matter to the notice of the Water Engineer, but other pressing matters prevented me from doing so. It appears to me that all the existing chains and other apparatus should be periodically tested by the Water Department until some better arrangements are devised and carried out.

3. On my visit to the lake in the afternoon of Saturday, the 2nd instant, I found that one of the columns of the tower had cracked by a heavy strain having been brought on it, in the process of raising one of the plugs. This will have to be repaired or renewed in due course.

4. With regard to the Water Engineer's statement that Pawai water was supplied to the Bhandarwada Reservoir, I beg to point out that the level of the top of water in the settling tank of the Bhandarwada Reservoir is 190·25 T. H. D., whereas that at the top of Pawai Lake is 190 T. H. D. Water cannot, therefore, reach from the Pawai Lake to the Bhandarwada by gravitation, except when the former is quite full and the level of water in the latter is considerably low.

5. Since Tansa has been overflowing and as water from that lake can flow into the Bhandarwada Reservoir at its full level, it could have been supplied into that reservoir without inconvenience or difficulty, especially at night, when the draw off in the City is small. It may also be pointed out that the consumption of water in the City during the rains is small, and as the Vehar Lake was also overflowing, Tansa water is not now required to replenish it, as is the case during the dry weather.

6. I agree with the Water Engineer that it is not possible to assign any reason for the burst. It seems strange that a pipe (immediately next to the one which has failed) which had cracked some years ago and was strapped, remained intact, while the one next to it, which to all external appearance was sound, should have given way.—I have, &c., M. C. MURZBAN, Executive Engineer.

Proposed by Grattan Geary, Esq., seconded by K. M. Shroff, Esq.—

"That the following be printed on the minutes of this day's meeting:—Memorandum No. 12989, dated 27th ultimo, from the Commissioner, forwarding a report from the Water Engineer on the subject of the failure of a 42" flanged pipe in the Vehar outlet tunnel."

No. 6313.

Amendment proposed by Kaikhosro N. Kabraji, Esq.—

"That the consideration of the papers forwarded with the Commissioner's memorandum No. 12989 of the 27th ultimo be postponed."

Not seconded.

The original motion was *carried.*

Read letter No. 12862, dated 26th ultimo, from the Commissioner, to the Secretary, as under :—

SIR,—With reference to Standing Committee resolution No. 5156 of 6th instant, I have the honour to say that the Health Officer recorded the opinion last year that no stable in Bombay had an adequate supply of pure water, and notices were accordingly served by my order upon the petitioners, amongst others, warning them that the laying on of water from the Municipal mains would be made a condition of their licenses in 1893-94. This order was within the Commissioner's powers under section 394 (1) (*c*), and it has been upheld against the petitioners by the Chief Presidency Magistrate. I have been willing to relax the order in any case in which it can be distinctly proved that water supplied otherwise than from the Municipal mains is sufficient in quantity and unobjectionable in quality, and this was found by the Health Officer to be the case with Jaffer Sulleman's stables referred to by the petitioners. The latter have now, on the warning of the Chief Presidency Magistrate, agreed to lay on Municipal water and the case as regards them is therefore at an end.—I have, &c., H. A. ACWORTH, Commissioner.

No. 6314. *Resolved* : " That letter No. 12862, dated 26th ultimo, to the Secretary, from the Commissioner, be forwarded for the information of the Corporation with reference to petition from Messrs. Hormusji Nowroji, Bejanji Jamsetji and Nussarwanji Ruttonji on the subject of water connections to their stables at Chandanwadi."

No. 6315. *Resolved* : " That the following be forwarded to the Commissioner for disposal and that the applicant be informed accordingly :—Letter, dated 26th ultimo, from Hadji Ebrahim Habib and others, on the subject of the refund of Halalkhor and Water taxes in respect of their property at Nowrojee Hill Road."

Read letter No. 13267, dated 2nd instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to report for the information of the Standing Committee that one Mr. Shavaksha Dhunjibhoy filed a suit against the Municipality for damages for alleged wrongful arrest and malicious prosecution. The case was heard by Mr. Justice Starling who decided it in favour of Mr. Shavaksha Dhunjibhoy and awarded Rs. 500 as damages, as also the cost of the suit.

The circumstances of the case are that on the 21st December 1891, Mr. Shavaksha Dhunjibhoy was served with a notice, under section 232 of the Municipal Act, to do certain drainage works at his premises at Gowalia Tank Road. As the notice was not complied with, a summons was issued on the 11th February 1892. The hearing of the case was postponed from time to time until the 24th March 1892, on which day the Magistrate issued a

warrant for the arrest of Mr. Shavaksha for non-appearance on that day in the Court in obedience to the summons served on him. Under that warrant Mr. Shavaksha was apprehended. Considering himself aggrieved by the process of the Magistrate he filed the present suit.

The Solicitors state that the judgment of the presiding judge has been carefully considered in consultation by Messrs. Macpherson and Inverarity, the counsels for the Municipality in the case, who are of opinion that the judgment proceeds upon a legally erroneous basis.

I therefore directed the Solicitors to make an application for a review of the judgment and have also informed them that if the judgment be confirmed on review an appeal should be preferred against it.

The Solicitors have now written to me that Mr. Justice Starling has granted a rule calling upon Mr. Shavaksha Dhunjibhoy to show cause why his judgment should not be reviewed, and has directed that the execution of the decree be stayed pending the decision of such rule on condition that the amount of the decree be deposited in Court as security.

I have directed the sum of Rs. 500 to be paid to the Solicitors under section 115 (*f*) of the Municipal Act, as they have, in anticipation of receiving the amount from me, deposited it into Court.

I beg to request the sanction of the Standing Committee to this and to propose that the amount be met out of the surplus cash balance, the grant for law charges being exhausted.

A surplus of 7¾ lakhs has been ascertained since the closing of the accounts for 1892-93. Out of this sum Rs. 86,175-12-0 have been sanctioned and a sum of Rs. 38,209-4-6 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 6316. *Resolved*: "That, with reference to the Commissioner's letter No. 13267, dated 2nd instant, sanction be given to the transfer of Rs. 500, from savings in the budget grant for drainage, A, miscellaneous drainage, section II, inspecting manholes and sewers, and cleaning, &c., miscellaneous drains, gutters and main sewers, to section III, law charges, Municipal Commissioner's General Office Establishment, to provide deposit of that amount in the High Court, during the review of the Hon'ble Mr. Justice Starling's judgment in the case of Shavaksha Dhunjibhoy *versus* the Municipality."

The following statement * was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 1st October 1893.

* *See* Appendix B.

Resolved : " That, with reference to letter No. 13417, dated 3rd instant, to the Chairman, from the Commissioner, the Committee approve (1) under section 169 (1) (*b*) and section 170 of the Municipal Act, of compounded water rate equal to the value of water consumed at 4 annas per 1,000 gallons being charged in respect of the Government Garden, Charni Road ; (2) under the terms of section 169 (1) (*b*) to the same compounded rate being charged for the water supplied to the University Gardens, such compounded rate to have effect so long as the said gardens are kept open without restriction for the use of the public."

No. 6817.

BOMBAY, 11*th October* 1893.

AT the meeting of the Standing Committee held this day, there were present :

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. : E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S. H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 4th instant, were signed.

The seal of the Corporation was affixed to deed of contract with Messrs. Framjee, Mahomed Ali & Co., for the work of earth filling on the Tansa pipe line near Kurla.

No. 6498.

Resolved : " That, as applied for by the Commissioner in his memorandum No. 13637, dated 5th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

No. 6499.

Name of Owner.	Where.
Mr. Peerbhoy Damji	Building at No. 245—247, Samuel Street."

Resolved : " That, as applied for by the Commissioner in his memorandum No. 14069, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 6500.

Considered the following :—

No. 13813 OF 1893-94.

BOMBAY, 7*th October* 1893.

To THE CHAIRMAN, STANDING COMMITTEE.

SIR,—I have the honor to say that it is imperatively necessary to adopt some means by which a more rapid supply of water than

is now available may be obtained at Love Grove for the purpose in particular of charging the pumps. Before an engine is started, it is necessary fully to charge with water the pumps belonging to it, as otherwise they draw air, vibration is set up, and risk, almost certainly, of breakage or other damage ensues. Many of the valves in a pump are open or half open when the time comes to charge it, owing to the interposition of silt or other foreign matter, and it is necessary that the water should be supplied more rapidly than it can escape. If there were a proper service of water mains at the Pumping Station instead of a single and ancient 3" pipe which has to serve the whole of Worli, there would be no absolute necessity for the donkey pump which I am about to ask for, though even in that case Mr. Murzban thinks it ought to be supplied as a means of guarding against fire and for other reasons. But the water-supply is totally inadequate for the purpose required. The Drainage and Executive Engineers, therefore, ask for a 5" quadruple acting donkey pump, with a capacity of about 7,500 gallons an hour. Mr. Murzban proposes to purchase the pump from Messrs. Greaves, Cotton & Co., who are agents for the article. Quotations were asked for from Messrs. Macbeth & Co., Messrs. Walsh, Lovett & Co., and Messrs. Greaves, Cotton & Co., and the tender of the last firm is the lowest. The pump will have to be obtained from England, and can be delivered within nine or ten weeks from date of order. The price will be £95, delivered in Bombay. I have the honor to request that the Standing Committee will recommend the Corporation to sanction this expenditure from the surplus cash balance. Since the closing of the accounts for 1892-93, a surplus of 7¾ lakhs has been ascertained. Out of this sum Rs. 86,175-12-0 have been sanctioned, and a sum of Rs. 38,209-4-6 has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

No. 6501. *Resolved* : " That, as applied for by the Commissioner in his letter No. 13813, dated 7th instant, the Corporation be recommended to sanction the purchase, from Messrs. Greaves, Cotton & Co., at a cost of £95, of a 5" quadruple acting donkey pump, with a capacity of about 7,500 gallons, required for the Love Grove Pumping Station, especially for the more rapid charging of water to the pumps. The cost to be met from surplus cash balance."

No. 6502. *Resolved* : " That, as applied for by the Commissioner in his letter No. 13888, dated 9th instant, sanction be given to the purchase, from Messrs. Kharshedji & Sons, Kirkee, of 42 pairs of bullocks at Rs. 150 per pair and of 24 pairs at Rs. 120 per pair for the Health Department, at a cost of Rs. 9,180, to the debit of the Budget grant of Rs. 13,350 for the purchase of bullocks.

" That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for

tenders which would otherwise be necessary, as Messrs. Kharshedji & Sons have for many years past supplied this Municipality with bullocks, and are specially engaged in the trade."

Resolved : "That the following be *recorded* :—Letter No. 13889, dated 9th instant, from the Commissioner, reporting that he has sanctioned the purchase of 42 cast-iron circular covers and frames and 120 cast-iron steps for manholes on pipe sewers and storm-water drains for the Connaught and Sussex Roads from Messrs. Richardson & Cruddas in continuation of their contract for the supply of cast-iron and galvanised sheet iron vent shafts, &c., for the Colaba Sewerage Works, at a total cost of Rs. 1,438." No. 6503.

Resolved : "That, as applied for by the Commissioner in his letter No. 13887, dated 9th instant, sanction be given, under section 501 of the Municipal Act, to the payment of Rs. 30 to Hadji Hasan, as compensation for injuries received by him while in the performance of his duty as a diver at Vehar Lake. The charge to be met from the contingent grant, Water Works." No. 6504.

Read the following :—

No. 9050 OF 1893-94.

BOMBAY, *4th October* 1893.

TO THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to report that there are at present five Persian wheels on the seashore, seven on tanks, and fourteen on wells, as shown in the accompanying statement marked A.

It is difficult to state accurately the quantity of water raised by the Persian wheels, as it varies according to the depth from which the water has to be raised and the condition of the wheel. The cost of the lift also depends on the above factors, the distance to which the water has to be carried, and the number of carts employed. When a small number of carts are employed and the distance to which the water has to be carried is great, much of the liftsmen's time is lost, thereby increasing the cost of the lift. On an average, however, each of the Persian wheels at Chowpati and other places on the seashore and on wells raise a quantity of water sufficient to fill twenty ordinary watering carts per day, or 620 cart loads of water per month of 31 days. The contents of each cart being 38·80 c. ft., or 242·50 gallons, the quantity lifted by the wheel per month is $620 \times 242{\cdot}50 = 150{,}350$ gallons. The value of the above quantity of water, computing it at 8 annas per 1,000 gallons, is Rs. 75·18. The average monthly expense of working a Persian wheel, including repairs, is estimated at Rs. 26·75, as shown below :—

Persian wheelmen	Rs.	18·75
Repairs, including stores	"	8·00
	Rs.	26·75

The average monthly working cost of drawing the same quantity of water, *viz.*, 150,350 gallons, from a stand-pipe, including the value of the water at the rate above quoted, is Rs. 87·56, as detailed below :—

Pipeman	Rs.	9·38
Repairs to water post, including stores	,,	3·00
Value of water	,,	75·18
	Rs.	87·56

From the above it will be observed that the monthly cost of watering by means of a Persian wheel is less by (Rs. 87·56—26·75) Rs. 60·81 per month than by a stand-pipe. As there are 26 Persian wheels in the City, the total monthly saving is about (Rs. 26 × 60·81 =) Rs. 1,581 nearly, or, say, Rs. 19,000 per annum. The above saving is obtained by putting a money value on the Municipal water consumed. If this value were left out of consideration, as it should be (as the Municipality in the present state of its water-supply would not really gain anything by saving the water), then the result would be in favour of the stand-pipe system. There are other considerations in favour of the watering by Persian wheels, which may be stated here. I.—Sea water is always available during high tides, and so is well water at all times of the day. Such a constant supply is not available from small water mains and from the large mains also when there is a burst. II.—Sea water keeps down the dust for a much longer time than lake water owing to the moisture induced in the former by the existence in it of nearly 3½ per cent. of salts, principally chloride of sodium (common salt) and chloride and sulphate of magnesium. The duration of the effect produced on dust by sea-watering may be judged by the fact that in the cold weather some of the roads sprinkled with sea-water on an evening remain sufficiently moist until the next morning, by which the watering on that morning is dispensed with. In passing, I may mention that the inconvenience and annoyance caused by dust-storms, similar to what was experienced in Bombay last hot weather, was experienced in Paris and other cities, where the addition of chloride of calcium in the water, or a sprinkling of it on the surface of the roads before watering, was tried and found, I believe, to have proved successful. The use of a compound of sodium, calcium and magnesium chlorides has also been recommended. It may either be sprinkled on the road in its dry state or mixed with the water in the water-cart. These refuse chlorides are cheap, and it is said (but with what degree of accuracy I cannot say) that economy is effected when applied to macadamized roads in the way above described. It is alleged that 30 per cent. of road repairs is thereby saved. One great disadvantage of watering from the pipes is the reduction of pressure while a hydrant on a small pipe is opened full, to supply the carts, causing thereby much inconvenience to ordinary consumers residing above a certain height above ground level. On the whole, sea-water is a better watering agent than lake

water. The system is less costly than that of watering from stand-pipes, were a money value put on the lake water. As regards the tanks for road watering, I may state that they have the advantage of equalizing the supply, and this is specially important during the morning hours when the draft for ordinary purposes is at its maximum and road watering is also rigorously prosecuted. This advantage is, however, small where the street main is large. The tanks are also advantageous when there is a break in the main. But I may state that the supply from them does not last for more than about three hours, so that a very high value cannot be attached to this convenience. Against the advantages above referred to of a tank-supply, the following disadvantages may be pointed out :—(i) They entail a large initial cost ; (ii) they cost more in maintenance ; and (iii) they occupy spaces on footpaths and roads.

A road-watering apparatus, manufactured by Merryweather, consisting of a reel and hose, has been ordered out, and is expected to arrive in a few days, when an experiment will be made of watering the roads with that machine. If that method proves successful, it will be generally introduced. Considering everything, I am of opinion (1) that the Persian wheels on the seashore and on the tanks and wells should be allowed to stand for the present. If the watering by means of the apparatus above referred to proves successful, then the wheels may be abolished, and watering effected by water drawn from the mains. (2) That the water tanks should also be allowed to remain where the water mains are less than 4″ in diameter and done away with in all other places, and hydrants or stand-pipes substituted in their places. If the Standing Committee decide upon keeping the Persian wheels, but without being a disfigurement new ones of an appropriate design could be erected. The cost, however, would be much larger. I submit the accompanying designs, Nos. 712 of 20th September 1893 and 704 of 8th September 1893, of improved Persian wheels on the seashore and on wells. The probable cost of each of these would be Rs. 4,664 and Rs. 1,408, respectively. The approximate cost of each of the wheels as now put up on wells is about Rs. 200, and that of each of those on the seashore from Rs. 1,500 to Rs. 2,000. I submit also a design, No. 721 of 30th September 1893, for an improved road-watering tank. In this design the water tank is proposed to be placed on an iron framework, supported on a central column of iron, so as to cause the least obstruction on the roads and foot-paths. The probable cost of providing a tank according to this design, excluding the cost of the water connection, would be Rs. 500, as against Rs. 200, the cost of the ordinary wrought-iron tank on wooden framework as now put up. It is with yourself and the Standing Committee to decide whether this additional expenditure should be incurred on improving the appearance of the Persian wheels and tanks which are at present considered as eyesores. Improvement in them will improve the appearance of the localities in which they may be placed. I regret the delay in

the submission of this report, but the delay was unavoidable owing to my having to obtain measurements of all the Persian wheels now in use to ascertain the cost of the improved ones.—I have, &c., M. C. MURZBAN, Executive Engineer.

No. 13769 of 6*th October* 1893.

Copy forwarded to the Municipal Secretary, with reference to Standing Committee's Resolution No. 1630 of 25th May 1893.

Mr. Murzban has fully discussed the question, and the Standing Committee will probably have little difficulty in arriving at a conclusion. The use of sea-water should on no account be superseded. There can be no doubt as to its superiority over fresh water as a road watering agent. It is not the chloride of sodium in it, but the chloride of magnesium which causes this result. This salt holds water so strongly that I believe it has never been found possible to free it from water and obtain it as a separate salt. My authority is Dr. Ratton. The results of the experiments about very shortly to be undertaken on road-watering by hose will probably settle the question of what tanks, if any, it is necessary to retain. It will be open to question, when the time comes, whether such tanks as it is found advisable to retain should or should not be replaced by handsomer and more expensive ones.—H. A. ACWORTH, Commissioner.

STATEMENT A.

POSITIONS OF THE EXISTING PERSIAN WHEELS.	No.
On Wells.	
Colaba Road ...	1
Esplanade Road	4
Marine Street...	1
Carnac Road ...	1
Waudby Road...	1
Nanabhoy Lane	1
Girgam Road near Shankarsett's house	1
Girgam Back Road near Police Court	1
Junction of Narayen Dabholker and Nepean Sea Road	1
Gunpowder Road	1
Matunga Road	1
On Seashore.	
Beach Road ...	1
Wodehouse Road	1
Queen's Road near Khote Footpath	1
Worlee Love Grove Pumping Station	1
Hornby Vellard	1
On Tanks.	
Framji Cowasji Tank near Money School...	1
Gowalia Tank	1
Foras Road near Grant Road Station	1
Mustan Tank near Bellasis Road Junction	1
Nabab Tank near DeLima Street	1
Lady Jamsetjee Road ...	1
Babula Tank ...	1
	26

Proposed by E. B. Carroll, Esq., seconded by K. M. Shroff, Esq.—

"That the consideration of the following be postponed :—Memorandum No. 13769, dated 6th instant, forwarding letter No. 9050, dated 4th idem, from the Executive Engineer."

Amendment proposed by G. W. Roughton, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

No. 6505. "That memorandum from the Commissioner, No. 13769, dated 6th instant, forwarding letter No. 9050, dated 4th idem, from the Executive Engineer, be *recorded*."

On a division, the *amendment* was *carried* as a substantive proposition by 7 votes *against* 4.

No. 6506. *Resolved* : "That the consideration of the report of the Health Officer for the Second Quarter of 1893 be postponed until next week, and that the Health Officer be asked to state whether there is any explanation of the fact that the mortality from phthisis was 29 less than in the corresponding quarter of last year, and that he be also requested to state in what locality the mortality from phthisis was less."

No. 6507. *Resolved* : "That the following be *recorded* :—Memorandum No. 13491, dated 4th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the transfer of Rs. 1,00,000, on the 29th ultimo, from the surplus cash deposit account to the Municipal General Fund pass book."*

The following return was read and *recorded* :—

No. 6508. Return of fires at Sewri (China Mill), forwarded with the Commissioner's memorandum No. 13471, dated 3rd October 1893. †

The following statement ‡ was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 8th October 1893.

* The Chief Accountant reports to the Commissioner that the balance standing to this account, after effecting the above transfer, is—

			Rs.	a.	p.
In 5 per cent. Municipal debentures for	Rs.	22,91,000	22,91,000	0	0
In 4 " " "	"	24,000	24,000	0	0
" " Government Paper for	"	2,33,000	2,31,786	9	0
Cash	...	... ...	6,170	14	11
		Total ... Rs.	25,52,957	7	11

† *See* Appendix C. ‡ *See* Appendix B.

Considered letter No. 13897, dated 9th instant, from the Commissioner to the Secretary, as under :—

SIR,—Referring to the resolution of the Standing Committee, No. 6316 of the 4th instant, I have the honor to report that the rule to show cause why a review of judgment should not be allowed came on for hearing before Mr. Justice Starling, on the 2nd instant. His Lordship, however, delivered judgment, refusing the review and dismissing the application with costs.

Acting under the instructions already given, and which were based on counsel's opinion, to file an appeal in case the judgment was confirmed on review, the Solicitors have filed an appeal, and in anticipation of receiving the amount from the Municipality, they have deposited Rs. 500 in Court as security for the respondent's costs. I have directed this amount to be paid to the Solicitors under section 115 (*f*) of the Municipal Act, and request the sanction of the Standing Committee to the payment thereof from savings in the Budget grant for Drainage, A, Miscellaneous Drainage, Section II, inspecting manholes, &c., a transfer statement for which is herewith forwarded.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That, as applied for by the Commissioner in his letter No. 13897, dated 9th instant, sanction be given to the transfer of Rs. 500 from savings in the grants for A, Miscellaneous Drainage, Section II, inspecting manholes and sewers, Executive Engineer's Budget, to General Office Establishment, Section III, Law Charges, Municipal Commissioner's Budget, to provide security for the respondents' costs in the High Court in the appeal of the Municipality against the decision of the Hon'ble Mr. Justice Starling in the suit of Shavakshah Dhunjibhoy *vs.* the Municipal Corporation."

No. 6509.

It was agreed that the consideration of letter No. 14040, dated this day, from the Commissioner, on the subject of the acceptance of the tender of Messrs. Hughes & Lancaster for the supply of engines, ejectors, &c., in connection with the Colaba Sewerage Works, be postponed till next week.

BOMBAY, 18*th October* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R.G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; the DRAINAGE ENGINEER on special duty; and the SECRETARY.

The minutes of the meeting held on the 11th instant, were signed.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Byramjee Jehangir and Tejoo Kaya & Co., for the work of paving footpaths, laying kerb-stone and water-tables, &c., in the City ; (2) with Messrs. Mistri, Bhedwar, Vachaghandi & Co., for works in pipe sewers, storm-water drains, &c., in Connaught and Sussex Roads ; and (3) with Messrs. Latham & Co., for the supply of enamelled iron plates for street names.

No. 6759. *Resolved* : " That, as applied for by the Commissioner in his memorandum No. 14641, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 6760. *Resolved* : " That, as applied for by the Commissioner in his letter No. 14040, dated 11th instant, sanction be given to the acceptance by him of the tender of Messrs. Hughes & Lancaster for the supply of engines, ejectors, &c., in connection with the Colaba Sewerage Works at a total cost of £13,650-18-10 (including £180 for maintenance of the works for six months), payable in England, and for the supply and laying of air and sealed sewage mains, erection of machinery, &c., at a total cost of Rs. 64,912 payable in Bombay.

" That, under the terms of Section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as Messrs. Hughes & Lancaster are the licensees of the Shone Patent, and are special mechanical engineers of the Shone system."

No. 6761. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 14343, dated 14th instant, sanction be given to the transfer of Rs. 150 from savings in the grant for conservancy branch, II, labour, A, scavengering, to licensing establishment, II, contingencies, to meet excess on the latter head, due to printing notice forms, certificate forms, &c., on account of the increased number of licenses."

No. 6762. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 14019, dated 11th instant, sanction be given to the transfer of Rs. 300 from savings in the grant for markets and slaughter houses, section V, lighting (cost of lighting other markets), to section IX, contingencies, to meet excess on the latter head for advertisement charges, weights and measures, and probable charges of the auctioneers for letting the stalls of the Foras Road Market."

No. 6763. *Resolved* : "That, as applied for by the Commissioner in his letter No. 14355, dated 14th instant, sanction be given to the payment of a monthly pension of Rs. 9, from 20th March last, to Mr. Kashinath Lakshman, a tracer in the Drainage Department, to the debit of the grant for pensions and gratuities, current year's budget.

"That sanction be also given to the payment of three days' pay, at Rs. 20 per mensem, from 17th to 19th March 1893, inclusive, to Mr. Kashinath Lakshman, being the period he continued in the service after the date on which he was placed on pension."

No. 6764. *Resolved* : "That the consideration of item No. 7 on the agenda paper be postponed pending the reconsideration of the question by the Commissioner and the Chief Accountant."

No. 6765. *Resolved* : "That the following be *recorded* :—Letter No. 14196, dated 12th instant, from the Commissioner, reporting, as required by section 92 (*a*) of the Municipal Act, that he has sold the right of cutting grass and collecting fruit from the Tansa duct line, from the north end of Pawai siphon to Ghatkopar siphon-head, to one Dhurmaji Bhiwaji Ranpisay, for Rs. 15, from 12th September 1893 to 31st January 1894. Stating that at the time of auction no bids were obtained as the place is rather inaccessible."

Considered the following :—

PROPOSED IMPROVEMENT OF MATHARPAKADI.

The Sub-Committee of the Standing Committee, as per margin, appointed on the 2nd August last, have inspected Matharpakadi Road and Rose Cottage Lane, and having carefully considered the estimates for three alternative means of improving the roadway, beg to recommend the carrying out of the following improvements at a total estimated cost of Rs. 18,188 :—

That a Sub-Committee, consisting of Messrs. Carroll, Shroff, Roughton and Dr. Bhalchandra, be appointed to report on the question of the improvement of Matharpakadi Road.

1. Improving the Matharpakadi Road from Mount Road to Gunpowder Road by the purchase of the whole of the buildings marked No. 1 and the two sheds marked 2 and 3, the purchase of the ground, coloured red, occupied by these buildings, and of the unoccupied land coloured in blue, and the easing the grade of the road from Mount Road to Gunpowder Road, Rs. 13,357.

2. Improving the grade of the roadway from Matharpakadi Cross Lane (C to D) and widening it near Rose Cottage Lane, as shown by the part coloured green, which is unoccupied land and could be acquired under the provisions of section 299 of the Municipal Act, Rs. 4,831. Total Rs. 18,188 as above.

3. The blue lines between C and D might be recommended to the Commissioner as the regular line of the street, and the vacant properties, marked yellow, referred to in the latter part of Mr. Murzban's letter to the Commissioner, No. 7675, might be acquired, with a view to the future improvement of the roadway, though the cost of these is not stated.

4. With regard to the proposal to widen this road from C to Rose Cottage Lane, estimated to cost Rs. 34,021, the Committee consider that, though it would make an important improvement, it is too large and expensive a work to be undertaken at present.

E. B. CARROLL.
K. M. SHROFF.
G. W. ROUGHTON.
BHALCHANDRA KRISHNA.

8th October 1893.

No. 6766.

Resolved : "That the report of the Sub-Committee regarding the proposed improvement of Matharpakadi Road be approved and adopted.

"2. That, with reference to memorials from H. H. Aga Khan, Sir Jamsetjee Jejeebhoy and others, the Corporation be recommended to sanction the carrying out of the following improvements at a total estimated cost of Rs. 18,188, to be met from surplus cash balance, *viz.*:—

"(1.) Improving the Matharpakadi Road from Mount Road to Gunpowder Road by the purchase of the whole of

the buildings marked No. 1 and the two sheds marked 2 and 3, the purchase of the ground, coloured red, occupied by these buildings, and of the unoccupied land coloured in blue, as shown on the tracing marked A attached hereto, and the easing the grade of the road from Mount Road to Gunpowder Road, Rs. 13,357.

"(2.) Improving the grade of the roadway from Matharpakadi Cross Lane (C to D) on the tracing and widening it near Rose Cottage Lane as shown by the part coloured green, which is unoccupied land and could be acquired under the provisions of section 299 of the Municipal Act, Rs. 4,831—total Rs. 18,188.

"(3.) That, with regard to the proposal to widen the road from C on the plan to Rose Cottage Lane, at an estimated cost of Rs. 34,021, the Standing Committee are of opinion that, though this would effect an important improvement, it is too large and expensive a work to be undertaken at present."

Resolved: "That, with reference to their resolution No. 6766 of this day, the Standing Committee would recommend for the consideration of the Commissioner the desirability of the blue lines between C and D on the tracing, being fixed as the regular line of the street, and of the vacant properties marked yellow referred to in the Executive Engineer's letter to the Commissioner, No. 7675, dated 5th ultimo, being acquired with a view to the future improvement of the roadway."

No. 6767.

Read the following :—

No. 21128 OF 1893-94.

BOMBAY, 17*th October* 1893.

To THE COMMISSIONER.

SIR,—In reference to the resolution No. 6319 of the Standing Committee, forwarded with your endorsement No. 14318 of the 14th instant, I have the honor to state that any explanation in regard to the reduction of mortality from phthisis or any other disease causes, during the short period of three months is likely to be fallacious. It is very unsafe to attempt to draw any conclusion from any data extending over only three months. I would draw your attention to the table of the Annual Report for 1892 at page 412.—I have, &c., T. S. WEIR, Health Officer.

No. 14596 OF 17*th October* 1893.

Forwarded to the Standing Committee for information with reference to their resolution No. 6506, dated 11th instant.—H. A. ACWORTH, Commissioner.

Comparative Statement showing the Number of Deaths from Phthisis during Second Quarters of 1892 and 1893.

Ward.	Localities.	Number of deaths, 1892.	Number of deaths, 1893.	More.	Less.
A	Upper Colaba	...	...	.....	.....
	Middle and Lower Colaba	8	12	4	.....
	Fort, Southern	1	...	.....	1
	„ Northern	27	26	.....	1
	Esplanade	6	4	.....	2
B	Mandvi	52	38	.....	14
	Chukla	73	58	.....	15
	Oomarkhari	93	86	.....	7
	Dongri	24	24	.....	.....
C	Market	35	42	7	.....
	Dhobi Talao	34	27	.....	7
	Fanasvadi	21	23	2	.....
	Bhuleshwar	76	49	.....	27
	Khara Talao	39	43	4	.....
	Kumbharwada	47	38	.....	9
D	Khetwadi	13	27	1	.....
	Girgaum	33	32	.....	1
	Chaupati	10	6	.....	4
	Walkeshwar	4	3	.....	1
	Mahalakshmi	8	10	2	.....
E	Mazagon	12	22	10	.....
	Tarwadi	11	11	.....	.....
	2nd Nagpada	33	36	3	.....
	Kamathipura	42	44	2	.....
	Tardeo	13	18	5	.....
	Byculla	30	36	6	.....
	1st Nagpada	8	12	4	.....
F	Parel	22	19	.....	3
	Sewri	2	3	1	.....
	Sion	5	4	.....	1
G	Mahim	9	5	.....	4
	Worli	3	10	7	.....
Water Division		2	.....	.....	2
Non-resident and unknown		9	8	.....	1
	Total...	805	776	71	100

29 less than in the corresponding quarter of the last year.

Resolved : "That the report of the Health Officer for the second quarter of 1893 and memorandum No. 14596, dated 17th instant, from the Commissioner, forwarding letter No. 21128 from the Health Officer of same date, be passed on to the Corporation."

No. 6768.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 14500, dated 16th instant, sanction be given, under sections 211 and 517 (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. W. H. Podmore for the recovery of Rs. 15 in respect of wheel-tax bill due by him."

No. 6769.

Resolved : "That letter No. 13898, dated 9th instant, from the Commissioner be printed and brought on for consideration this day fortnight."

No. 6770.

Considered the following :—

No. 2409 OF 1893-94.

BOMBAY, 10*th October* 1893.

TO THE COMMISSIONER.

SIR,—I have the honor to forward, for transmission to the Standing Committee, a return of receipts and disbursements of the Bombay Municipality for the quarter ending 30th September 1893 as compared with the corresponding quarter for the previous year, as required by the then Town Council's Resolution No. 465 of 1st June 1887, with a list of additional grants, amounting to Rs. 52,199-12-0, sanctioned by the Corporation during the quarter.

2. The unappropriated surplus cash balance, as pointed out in the Annual Report of this office for the past year, amounts to Rs. 7¾ lakhs, out of which Rs. 83,386-12-0 have already been sanctioned by the Corporation up to the end of the quarter for additional grants for the current year.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

No. 14116 OF 12*th October* 1893.

Forwarded to the Municipal Secretary.—H. A. ACWORTH, Commissioner.

ACCOUNT OF THE BOMBAY MUNICIPALITY FOR CONTRASTED WITH THAT FOR THE

	Budget Estimate.	Quarter ending 30th September 1892.	Quarter ending 30th September 1893.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Opening Balance	16,00,000 0 0	89,818 5 6	6,05,183 1 6
General Tax	17,97,596 0 0	3,65,450 14 1	4,70,666 6 11
Water Tax (including other Miscellaneous Revenue)...	13,25,000 0 0	4,12,368 14 1	3,71,257 0 9
Wheel Tax and Tolls ...	3,28,324 0 0	50,794 4 9	51,404 6 0
Halalkhor Tax	5,74,000 0 0	1,46,032 15 1	1,17,307 8 6
Duties, Town...	9,00,000 0 0	† 1,763 5 0	14,015 0 1
Licenses	76,850 0 0	19,606 12 0	13,032 13 0
Liquor Licenses, Instalment paid by Govt. in lieu of, under B, Act V of 1878 ...	1,43,750 0 0	.....	.....
Tobacco Duty (under Act IV of 1857)	1,82,000 0 0	29,311 0 0	31,545 14 0
Market Receipts	3,61,000 0 0	1,00,065 15 0	1,02,690 11 7
Miscellaneous Fees	40,300 0 0	15,377 4 0	9,748 11 2
„ Fines and Penalties...	7,000 0 0	4,365 1 0	3,076 10 9
„ Receipts ...	1,20,000 0 0	36,169 8 6	27,540 5 2
„ Savings ...	2,000 0 0	.....	.....
Public Gardens	6,700 0 0	1,076 9 0	1,234 15 6
Contribution from Municipal servants towards Pension, &c., Fund	15,300 0 0	3,940 12 5	3,973 5 7
Tramway Rent	36,200 0 0	.....	.....
Interest and Profit on Investments	2,29,800 0 0	56,833 14 7	56,112 15 1
Premia on the 4 per cent. Loan for repayment of the Govt. consolidated Loan	.....	.....	25,243 5 6
	61,45,820 0 0	12,39,630 7 6	12,98,850 1 7
Debt	.....	.....	41,83,500 0 0
Bank of Bombay Loan and other Deposit Accounts ...	.....	21,15,113 15 7	8,22,794 1 8
Workshop Recoveries ...	.....	21,353 6 0	15,115 1 0
Advances	.....	2,07,707 3 3	52,221 2 10
Deposits	.....	87,828 6 11	1,51,580 6 8
Rupees ...	61,45,820 0 0	36,71,633 7 3	65,24,060 13 9
Total Rupees...	77,45,820 0 0	37,61,451 12 9	71,29,243 15 3

† Debits deducted.

THE QUARTER ENDING 30TH SEPTEMBER 1893 AS QUARTER ENDING 30TH SEPTEMBER 1892.

	Budget Estimate.	Quarter ending 30th September 1892.	Quarter ending 30th September 1893.
DISBURSEMENTS	Rs. a. p.	Rs. a. p.	Rs. a. p.
Superintendence	1,95,736 0 0	46,282 2 7	52,188 15 3
Assessment and Collection Department	2,66,060 0 0	64,831 1 1	61,517 12 3
Fire Brigade...	1,11,515 0 0	23,760 4 0	16,889 13 8
Public Gardens	80,147 0 0	19,605 14 8	24,552 15 11
Public Works Engineer's Dept. — General Supervision Estabt.	40,924 0 0	12,134 12 2	9,158 6 2
Public Works Engineer's Dept. — Drainage	1,96,991 0 0	79,331 10 8	59,920 14 1
Public Works Engineer's Dept. — Water Works	2,99,924 0 0	48,493 12 10	49,212 5 2
Public Works Engineer's Dept. — Streets and Buildings Inspection and Supervision Estabt. ...	87,917 0 0	22,560 1 4	20,841 2 5
Public Works Engineer's Dept. — Public Lighting ...	3,21,410 0 0	92,981 7 3	77,526 12 7
Public Works Engineer's Dept. — Road Watering... ...	77,744 0 0	9,576 13 9	15,990 0 3
Public Works Engineer's Dept. — Road Repairs and Maintenance...	4,08,419 0 0	1,04,047 2 5	98,712 7 9
Public Works Engineer's Dept. — Street Improvements ...	1,01,000 0 0	86,906 5 10	10,697 7 1
Public Works Engineer's Dept. — Cleaning, Lighting and Repairing Port Trust Wharves	38,842 0 0	.....	37,642 0 0
Health Department... ...	13,92,200 0 0	3,44,121 1 3	3,67,463 2 8
Police Charges	3,63,345 0 0	64,571 5 9	90,836 4 0
Education	91,032 0 0	19,602 11 6	17,916 10 0
Hospitals	60,108 0 0	11,761 7 7	11,969 9 5
Miscellaneous	52,050 0 0	17,228 14 8	17,731 2 3
New Works	81,292 0 0	23,560 2 10	20,719 11 2
Debt (including Sinking Fund deposited with the Bank of Bombay)... ...	21,73,412 0 0	5,71,331 3 11	‡ 48,85,217 10 6
	64,40,068 0 0	16,62,688 8 1	59,46,705 2 7
Loan Works Accounts ...	.....	4,78,301 6 3	1,24,200 7 4
Bank of Bombay Loan and other Deposit Accounts ...	.....	13,27,761 14 6	4,09,998 11 10
Workshops	.....	33,865 4 3	30,619 9 0
Advances	.....	1,29,485 7 2	76,862 11 9
Deposits	.....	69,750 10 7	2,86,021 11 4
Rupees...	64,40,068 0 0	37,01,853 2 9	68,74,408 5 10
Closing Balance ...	.....	59,598 10 0	2,54,835 9 5
Estimated Balance on 31st March 1894...	13,05,752 0 0	.....	.....
Total Rupees...	77,45,820 0 0	37,61,451 12 9	71,29,243 15 3

‡ This includes the balance (Rs. 42,48,003-5-9) due to Government on 1st July 1893 on account of the 4½ per cent. Consolidated Loan paid off as sanctioned by raising from the public a loan of 42 lacs at 4 per cent.

List of Additional Grants sanctioned by the Corporation for the Quarter ending 30th September 1893.

Reso. No.	Date of Resolution.	Nature of work.	Amount.
	1893.		Rs. a. p.
3452	July 10 ...	Grant of Rs. 5,000 from surplus cash balance for the purchase of one of Merryweather's small size 'Valliant' steam pumping engines and Rs. 248, the estimated monthly charge for working and maintaining the engine ...	6,701 0 0
"	" " ...	Grant of Rs. 1,000 from surplus cash balance for the purchase of 11 automatic flushers to be erected in certain districts for the purpose of flushing gullies and sewers	1,000 0 0
3977	" 20 ...	Grant of Rs. 26,744-8 0 from surplus cash balance in addition to the budget grant of Rs. 40,000 for the purchase of coal for the Love Grove Pumping Station up to the end of the current financial year	26,744 8 0
4459	August 7 ...	Grant of Rs. 656-4-0 from surplus cash balance for the purchase of 8 acres and 30 guntas of land from Mr. Purshotum Ganoba on the west side of Vehar Lake at the rate of Rs. 75 per acre, inclusive of the value of the trees standing thereon	656 4 0
5328	September 7 ...	Grant of Rs. 16,000 from surplus cash balance to meet the cost of providing a sheep and goat market at DeLisle Road....	16,000 0 0
5330	" 7 ...	Grant of Rs. 558 from surplus cash balance to meet the cost of establishment for the New Foras Road Market and Rs. 96 for clothing for the peons up to the end of the current financial year	654 0 0
5332	" 7 ...	Grant of Rs. 444 from surplus cash balance to meet the cost of providing equivalent weights of 4, 8, 10, 20 and 40 seers, in addition to those now in use, and to substitute for the Phara (dry) measure containing 16 Pylis or 3,145 cubic inches a Phara (dry) measure containing 17 Pylis or 3341·52 cubic inches	444 0 0
		Total Rs....	52,199 12 0

Resolved: "That the following be printed on the minutes of this day's meeting :—Memorandum No. 14116, dated 12th instant, from the Commissioner, forwarding letter No. 2409, dated 10th idem, from the Chief Accountant."

No. 6771.

Considered application from Mr. Mahomed Ebrahim and others asking that they may be exempted from the payment of certain fees now charged for the temporary occupancy of roads during particular religious ceremonies.

Read the following :—

No. 9379 OF 1893-94.

BOMBAY, *10th October* 1893.

To THE COMMISSIONER.

SIR,—I have the honour to report that the practice at present is to allow the Mahomedans the occupation of the roads free of charge (*a*) for the ten days which form the important part of the Mohurrum and (*b*) at any time during 40 days after a death takes place in a family. (2) In addition to the privilege above referred to, the applicants then claimed to occupy the roads free of charge on (*a*) the 11 days of the Piran Pir ceremonies, (*b*) the 12 days of the "Maohad" ceremonies, and (*c*) the 20th, 30th, and 40th days of the Mohurrum. (3) This additional privilege to occupy the roads on the days referred to in the preceding paragraph were not granted, because they are days of ordinary religious ceremony, for which a sum of Rs. 3 per day is being charged. (4) From the accompanying copy of No. 107, dated 24th June 1893, from the Police Commissioner, it appears that the Police used to allow the Mahomedans to occupy the roads free of charge on the occasion of—(*a*) Death ceremony for 1st, 3rd, 7th, 10th, 20th, 30th and 40th day ; (*b*) Mohurrum 1st to 10th day, and Chaliswa called Mohurrum Meejlees; and (*c*) Gyarani and Barni when joint applications are made by the members of the localities concerned. (5) From the Police Commissioner's letter above referred to, it also appears that the Hindus were allowed similar privileges for (*d*) Hurri Kirtan opposite the temples and (*e*) Lulit Kirtan also opposite the temples. (6) It appears advisable under the circumstances to follow the practice of the Police and to allow the Hindus and Mahomedans to occupy the roads free of charge on the days referred to by the Police Commissioner in his No. 107, dated 24th June 1893.—I have, &c., M. C. MURZBAN, Executive Engineer.

No. 107 OF 1893-94.

BOMBAY, *24th June* 1893.

To THE EXECUTIVE ENGINEER,
Bombay Municipality.

SIR,—With reference to your letter No. 3902, dated 19th instant, I have the honour to give below, as requested, the list of class of cases in which permission was granted by me free of charges for placing chairs, benches, &c., on the public roads :—

1. Death ceremony—1st, 3rd, 7th, 10th, 20th, 30th and 40th day.
2. Mohurrum—from 1st to 10th day and Chaliswa, called Mohurrum Meejlees.
3. Gyarani and Barni, when joint applications are made by the members of the localities concerned.
4. Hurri Kirtan opposite temples.
5. Lulit Kirtan opposite temples.—I have, &c., T. CRUMMY, Acting Deputy Commissioner of Police.

No. 14298 OF 13*th October* 1893.

Copy forwarded to the Municipal Secretary in reference to the resolution of the Standing Committee No. 5778 of the 20th ultimo. Orders as per para. 6 of the Engineer's report will be issued.—H. A. ACWORTH, Commissioner.

No. 6772. *Resolved* : " That, in reply to their petitions, dated 20th ultimo and 10th instant, Mr. Mahomed Ebrahim and others be informed that the Commissioner will issue orders for the occupancy of roads by Mahomedans on occasions of religious ceremonies free of charge as under :—

" 1. Death ceremony—1st, 3rd, 7th, 10th, 20th, 30th and 40th days.

" 2. Mohurrum—from 1st to 10th days and Chaliswa called Mohurrum Meejlees.

" 3. Gyarvien and Barvien, when joint applications are made by the members of the localities concerned.

" And that Hindus will be allowed similar privileges—

" (1) Hurri Kirtan (opposite temples).

" (2) Lulit Kirtan (opposite temples)."

No. 6773. *Resolved* : " That the following be forwarded to the Commissioner in continuation of the Committee's resolution No. 6315, dated 4th instant, and that the applicants be informed accordingly :—Letter, dated 10th instant, from Hajee Ebrahim Habib and others on the subject of the refund of halalkhor and water taxes in respect of their property at Nowroji Hill Road."

No. 6774. *Resolved* : " That the following be forwarded to the Commissioner for disposal in continuation of the Committee's Resolution No. 5779, dated 20th ultimo, and that the applicant be informed accordingly :—Letter, dated 10th instant, from Mr. Mahomed Haji Dawood on the subject of the assessment of his property No. 4149, Street No. 42, Nowroji Hill Road."

No. 6775. *Resolved* : " That the following be *recorded* :—Memorandum No. 14251, dated 13th instant, from the Commissioner, forwarding the following results of examination of the Tulsi, Vehar and Tansa waters :—

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir on the 27th September 1893.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·12

Sample of partly filtered Tulsi water taken from the distributing basin, Malabar Hill Reservoir, on the 27th September 1893.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·05

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 29th September 1893.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·07

Sample of Tansa water drawn from a hydrant on 27" main, Arthur Road, on the 3rd October 1893.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·06"

The following return was read and *recorded* :—

No. 6776. Return of fires at Old Nagpada, Ripon Road and Kambeker Street, forwarded with the Commissioner's memorandum No. 13965, dated 10th October 1893.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 15th October 1893.

The Committee was asked to consider the report of the Sub-Committee on the subject of the repair of the retaining wall of the Walkeshwar Road, but after discussion it was agreed that the consideration thereof be postponed until the next meeting.

BOMBAY, 25*th October* 1893.

AT the meeting of the Standing Committee held this day, there were present:—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; the CHIEF ACCOUNTANT; and the SECRETARY.

The minutes of the meeting held on the 18th instant, were signed.

The Secretary reported that he had received a telegram from Mr. Roughton from Matheran, stating that he was unable to attend this meeting.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Ramchandra Dadajee & Co. for the work of the extension of Khandia Street, and (2) with Messrs. John Fleming & Co. for the supply of stoneware pipes, &c., for the Drainage Department.

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* *See* Appendix C. † *See* Appendix B.

No. 6999. The seal was attached to deed of covenant between the Corporation and Sir Albert D. Sassoon, whereby the Corporation bind themselves to produce, when called upon, certified copy of indenture of mortgage and original conveyance to Sir Albert of certain land, the greater portion of which has now been purchased from him by the Municipality for the improvement of Agripada.

The seal was also affixed to the following debentures, *viz.* :—1 consolidated debenture of the Bombay Municipal Loan of 1878, Nos. 3146 and 3147, for Rs. 1,000 ; 1 ditto ditto, Sanitary Works Loan of 1885, Nos. 58 to 65 NN. for Rs. 4,000 ; 2 attested duplicates of debentures of the Bombay Municipal Loan of 1878, Nos. 3618 and 3619, for Rs. 500 each ; 7 ditto ditto Sanitary Works Loan of 1885, Nos. 33J, 45J to 47J, 50J, 3190NN and 3191NN, for Rs. 500 each ; 17 attested duplicates of debentures of the Tansa Water Works Loan, Nos. 158, 276 to 279, 326, 327, 831, 838 to 841, 13930, 14040, 14041, 17560 and 17561 for Rs. 500 each ; 1 attested duplicate debenture of the Tansa Water Works Loan, No. 19751-52, for Rs. 1,000.

No. 7000. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 15108, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 7001. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 14650, dated 18th instant, sanction be given to the acceptance by him of the offer of Messrs. Macbeth Bros. for the supply of one of Merryweather's ' Valliant ' Steam Pumping Engines, at a cost of Rs. 4,416, to the debit of the grant of Rs. 5,000 sanctioned by the Corporation on the 10th July last for the purchase of the engine.

" That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as the rate tendered is a reasonable one and the lower of the two offers received."

No. 7002. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 14534, dated 17th instant, sanction be given to the transfer of Rs. 80-1-0 from savings in the grant for property and wheel tax establishment, II, ward inspection office, to same head, I, head quarters office, to meet acting allowance payable during the absence of the Registrar and Accountant on privilege leave."

Resolved: "That, as applied for by the Commissioner, in his memorandum No. 14610, dated 18th instant, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 2,965 from savings in the Budget Grant, Fire Brigade, section I, establishment, to section II, rent (rent of fire stations and quarters), to meet excess on the latter head owing to insufficient provision being made in the Budget, as it was expected that the new stations and quarters would be ready by the end of October, and on account of increased rent to be paid to the landlord of the Fort Fire Station."

No. 7003.

Resolved: "That, as applied for by the Commissioner, in his memorandum No. 14993, dated 23rd instant, sanction be given to the transfer of Rs. 230 from savings in the grant for conservancy branch, II, labour, A, scavengering, to property and wheel tax establishment, I, head quarters office, to meet acting allowance payable during the absence of the 1st Assistant Assessor on privilege leave for two months."

No. 7004.

Resolved: "That, as applied for by the Commissioner, in his letter No. 14559, dated 17th instant, sanction be given to the employment of 2 maistries—(1) on Rs. 35 and the other on Rs. 30 per mensem respectively—for the Colaba sewerage works. The amount to be met partly from savings in the establishment grant for the works and partly from savings in the grant for establishment employed on the Umarkhadi sewerage."

No. 7005.

Resolved: "That, as applied for by the Commissioner, in his letter No. 14978, dated 23rd instant, sanction be given to the employment, for a period of two months, of one Surveyor on Rs. 70 a month and a lascar on Rs. 10 a month for the work of preparing estimates for house connections at Parel village. The cost Rs. 160 to be met out of savings in the grant for the Parel Government House Gate Road drainage works."

No. 7006.

Resolved: "That, as applied for by the Commissioner, in his letter No. 14977, dated 23rd instant, sanction be given to the payment of conveyance allowance at the rate of Rs. 30 a month from 29th June to 10th August last, and from 28th September to 15th October 1893, to the Superintendent, F Ward, Assessment and Collection Department, for doing the work of Superintendent, G Ward, in addition to his own duties,

No. 7007.

during the absence of the Superintendent, G Ward. The charge to be debited to the conveyance allowance to the last mentioned officer."

Resolved : "That, with reference to the Commissioner's letter No. 14871, dated 21st instant, the Corporation be recommended to sanction the renewal of the lease, for a period of 3 or 5 years from 1st March 1894, of the chawls and stables on Foras Road, belonging to Bai Pirojbai, widow of Mr. Dhunjibhai Dossabhai Mama, and occupied by the biggaries and bullocks of the Health Department, at a monthly rental of Rs. 350 and on the same terms as at present, except that Water and Halalkhor taxes be paid by the Municipality." No. 7008.

"That, in the opinion of the Committee, it would be desirable to enter into a lease for 3 years only if the premises can be obtained for the shorter period on the same terms."

Resolved : "That, as applied for by the Commissioner, in his letter No. 14518, dated 16th instant, and under the provisions of section 91 of the Municipal Act, the Committee approve of application being made by him to Government to acquire under the terms of the Land Acquisition Act 1,794·57 square yards, or thereabout, of ground at Gibbs' Road, belonging to the Parsi Panchayet, the same having been taken for the site of the retaining wall on the eastern side of that part of the road which has recently been reconstructed." No. 7009.

Resolved : "That, as applied for by the Commissioner, in his letter No. 14872, dated 21st instant, sanction be given, under section 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes for the recovery of Rs. 41 from Raja Jatra, the owner of the hack victoria, whose driver was responsible for the breaking of a lamp and column at Cruikshank Road." No. 7010.

Resolved : "That, as applied for by the Commissioner, in his letter No. 14517, dated 16th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Spencer & Co. for constructing pipe-sewers, man-holes, &c., in Currey Road, whereby the contract time shall be extended from 2nd October to 22nd October 1893." No. 7011.

It was agreed that the consideration of the following be postponed till next week :—Report of the Sub-Committee on the subject of the repair of the retaining wall of Walkeshwar Road.

Resolved : "That the following be *recorded*:—Memo-
No. 7012. randum No. 14606, dated 18th instant, from the Commissioner, forwarding letter No. 2500, dated 14th idem, from the Chief Accountant, reporting the sale on the 13th of the same of a further lot of 4 per cent. Government paper for Rs. 1,50,000, belonging to the surplus cash deposit account at 105 per cent. against the cost price of 99½ per cent. Also memorandum No. 15004, dated 24th instant, from the Commissioner, forwarding letter No. 2601, dated 23rd idem, from the Chief Accountant, reporting the sale of a further lot of 4 per cent. Government paper for Rs. 83,000, belonging to the surplus cash deposit account on the 21st of the same at 105¼ per cent. against the following cost prices :—Rs. 67,500 at 99½ per cent., Rs. 15,500 at 99$\frac{3}{16}$ per cent."

Resolved : "That the following be forwarded to the
No. 7013. Commissioner for favour of report :—Memorandum from the Municipal Secretary, forwarding petition, dated 17th instant, addressed to the Corporation from Messrs. J. Hendrick, W. M. Thomas and others, residents of Peerbhoy's Buildings, Foras Road, complaining of the erection of an extensive milch cattle stable to the west of the building and the nuisance caused by a large collection of stagnant water adjoining the stables and to the west and front of their residences."

Resolved : "That the following be *recorded* :—Memo-
No. 7014. randum No. 14607, dated 18th instant, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the following transfers to the Municipal General Fund Pass Book on the 14th instant, *viz.* :—(*a*) from the Surplus Cash deposit account, Rs. 1,00,000 ; (*b*) from the 5 per cent. Municipal Loans Sinking Fund deposit account, Rs. 16,000 ; and (*c*) from the Worn-out Mains Renewal Fund deposit account, Rs. 2,000. Also reporting, with reference to the Committee's resolution No. 5620, dated 9th January 1889, the following transfers from one invested fund to another, *viz.*, from the Surplus Cash deposit account (*a*) to the 5 per cent. Municipal Loans Sinking Fund deposit account, 5 per cent. Municipal Debentures for Rs. 16,000, on 9th instant ; and from the Surplus Cash deposit account (*a*) to the Worn-out

Mains Renewal Fund deposit account, 5 per cent. Municipal Debentures for Rs. 2,000 on the 14th of the same.*

Resolved : " That the following be laid on the table :—

No. 7015. Letter, dated 20th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina, stating that they have audited the weekly statement of receipts and disbursements at the end of each week for the month of September last, and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statement of their scrutiny of the accounts."

The following return was read and *recorded* :—

No. 7016. Return of fires at Jhanjikar Street and Warden Road, forwarded with the Commissioner's memorandum No. 13965, dated 17th October 1893.†

The following statement‡ was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 22nd October 1893.

Resolved : " That, as applied for by the Commissioner,

No. 7017. in his memorandum No. 15001, dated 24th instant, sanction be given to the transfer of Rs. 160-8-0 from savings in the grant for conservancy branch, section II, labour, A, scavengering, to town duty collection, commission and contingencies, G. I. P. Railway, to meet excess due to the cost of a new silver seal supplied to the Company for sealing packages of ghee."

Resolved : " That the following be *recorded* :—

No. 7018. Memorandum No. 15003, dated 24th instant, from the Commissioner, forwarding statement, as

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* The Chief Accountant reports to the Commissioner that the balances standing to the above account after effecting the transfers are as under :—

(*a*) In 5 per cent. Municipal debentures for	Rs. 22,73,000	... Rs.	22,73,000	0 0
„ 4 „ „ „	„ 24,000	... „	24,000	0 0
„ 4 „ Government Paper for	„ 83,000	... „	82,536	9 0
In cash		... „	1,15,965	1 11
		Total Rs....	24,95,501	10 11
(*b*) In 5 per cent. Municipal Debentures for	Rs. 6,80,500	... Rs.	6,80,500	0 0
In cash		„	413	5 0
		Total Rs. ..	6,80,913	5 0
(*c*) In 5 per cent. Municipal Debentures for	Rs. 1,02,000	...Rs.	1,02,000	0 0
In cash		„	427	1 4
		Total Rs....	1,02,427	1 4

† *See* Appendix C. ‡ *See* Appendix B.

under, of houses or portions of houses which fell during the month of September 1893 :—

Statement of houses or portions of houses which fell during the month of September 1893.

No.	Ward.	Street No.	Locality.	Names of Owners.	Description of Buildings.	Age of Building or date of erection (if known).	Date of fall.	Cause of fall.	Part fallen.	Casualties. Persons injured.	Casualties. Persons killed.	Estimated loss.	Whether or not action taken by the Municipality.	Whether or not warning given to the parties.	Remarks.
1	A	365 365	Bora Bazaar Street.	TulsidasKhimjee.	House	... Nil ...	22nd Sept. 1893.	Removal of the wall of next house.	North side wall	Nil.		Rs. 3,000	...	Nil ...	
2	B	422 422	Memonwada Road & Old Nagpada.	Haji Mahomed Mistry.	Do.	... Do. ...	Do. ...	On account of oldness.	West side portion.	Nil.		200	...	Do....	
3	D	14	Nagdowri Cart	Ruttonjee Pestonjee Sodawalla.	Cookroom	... Do. ...	5th Sept. 1893.	On account of rotten post.	Portion.	Nil.		400	...	...	Action taken and removed the remaining dangerous portion.

No. 10000 OF 1893-94.

23rd October 1893.

Forwarded to the Municipal Commissioner.—M. S. BARUCHA, *for* Executive Engineer, Municipality.

No. 15003 OF 1893-94.

Forwarded to the Standing Committee for information.—H. A. ACWORTH, Commissioner.

Read letter No. 15054, dated 24th instant, from the Commissioner to the Secretary, as under:—

SIR,—With reference to the resolution of the Corporation, No. 1529, dated 15th May 1893, sanctioning the expenditure of Rs. 1,247 for the construction of a collecting night-soil depôt at Colaba, I have the honour to state that the work was nearly completed within the estimated cost, but that in consequence of the arrangement with the B. B. & C. I. Railway Co., referred to in the resolution of the Corporation, No. 3976, dated 20th July last, it has been found necessary to undertake certain extra works. They consist of (1) the erection of a fence on the railway ground at the end of Thomas Street; (2) the construction of a road with packing; (3) the construction of a catch-pit and an iron gateway; (4) the laying of a small length of drain for a water stand-pipe; and (5) the erection of a sewage pump. All these works are necessitated by the arrangement above referred to and to meet the cost of which a supplementary grant of Rs. 868 is required. I therefore request the Standing Committee to recommend the Corporation to sanction the expenditure of Rs. 868 out of surplus cash balance for the purpose. A surplus of Rs. 7¾ lakhs has been ascertained since the closing of the accounts for 1892-93. (Chief Accountant's Report for the same year, page 76.) Out of this sum, Rs. 1,12,635-0-6 have been already sanctioned and the expenditure of £95, or about Rs. 1,472, has been recommended for sanction.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved: "That, as applied for by the Commissioner, in his letter No. 15054, dated 24th instant, the Corporation be recommended to sanction the grant of Rs. 868 from surplus cash balance to meet the cost of the following extra works in connection with the collecting night-soil depôt at Colaba:—(1) the erection of a fence on the railway ground at the end of Thomas Street; (2) the construction of a road with packing; (3) the construction of a catch-pit and an iron gateway; (4) the laying of a small length of drain for a water stand-pipe; and (5) the erection of a sewage pump."

No. 7019.

BOMBAY, 1*st November* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman*.

THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 25th ultimo were signed.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Heptula Sheik Adam & Co. for the supply of 1,000 cases of Kerosine oil, 125° proof test, and (2) with Messrs. Framroz Pestonji & Co. for the construction of bigaries' chawls at Bori Bunder.

The seal was also affixed (1) to deed of agreement between Mr. Damodher Ganesh and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property, No. 18, Pestonji Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 10 per square yard for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition ; (2) to ditto between Mr. Kharsetji Bezonji Laher and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises Nos. 3 to 5, situate at Bora Musjid Lane, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 15 per square yard for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition ; and (3) to ditto between Mr. Jamsetjee Nowrojee Kapadia and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises Nos. 50—52, situate at Chandanwadi, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 10 per square yard, for any land shown on the plan to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition.

Resolved: "That, as applied for by the Commissioner, in his memorandum No. 15684, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 7323.

Resolved: "That, as applied for by the Commissioner, in his letter No. 15276, dated 27th ultimo, and under the Pension Regulations, sanction be given to the payment of Rs. 82-9-9 as compassionate allowance to Latiba, widow of Ahmed Khan Gulabkhan, peon in the Assessment Department, who died on the 25th May last. The amount to be met from the grant for pensions, gratuities, &c., current year's budget."

No. 7324.

Resolved: "That, as applied for by the Commissioner, in his letter No. 15214, dated 26th ultimo, and under the Pension Regulations, sanction be given to the payment of a compassionate allowance of Rs. 290-3-3, to Bai Khatizabai, widow of Mahomed Seedick, a clerk in the Chief Accountant's Department, and such of her sons as are entitled to receive the same. The amount to be debited to the grant for pension, gratuities, &c., current year's budget."

No. 7325.

Read letter No. 15582, dated 31st ultimo, from the Commissioner to the Secretary as under :—

SIR,—I have the honour to forward a statement of service of Mr. C. J. Hewett, Chief Inspector of the Water Works Department, from 1st December 1859 to 30th September 1893, prepared by the Chief Accountant, and to request the sanction of the Standing Committee under regulation 15 (*c*) of the new Pension Regulations to a monthly pension of Rs. 150 being granted to him from 1st October 1893. It will be seen from the statement of service that Mr. Hewett has rendered service to the Municipality for 33 years and 10 months. He has been on the Water Works Staff since the Vehar supply was introduced into the City and has held the responsible post of Chief Inspector for about 25 years. It will also be remembered that until recently the supply of water has been intermittent and he has had to give constant attention which the equitable distribution of an insufficient supply demanded. In addition to this he has had to attend to the special arrangements for giving water-supply in cases of fire which demanded immediate attention at all hours of day and night. But as there was no provision in the old pension rules for granting good service pension, no special care was taken to record special services rendered by officers and other subordinates, and it is difficult now to quote instances of meritorious service rendered by Mr. Hewett during the period of his nearly

34 years' service. But I may refer the Standing Committee to the special service rendered by Mr. Hewett at the time of the subsidence on Gibbs' Road which occurred in September 1892. As soon as he received information about the dangerous state of the road on 1st September 1892, he went to the spot, shut off the supply and made arrangements for putting up lights, &c., to prevent accident. By this prompt attendance he prevented the Gibbs' Road from being flooded and washed away. His service on that occasion are referred to in Mr. White's report No. 3103W, dated 21st September 1892, which was forwarded with this office No. 13852 of the 22nd idem for the information of the Standing Committee and the Corporation. This report was recorded by the Corporation in their resolution No. 8413, dated 10th November 1892.

Under the circumstances I recommend that he may be also given under regulation 15 (*d*) of the new pension regulations a good service pension of Rs. 25 per mensem from 1st instant.

The whole amount of Rs. 175 can be paid out of the current year's grant for pensions, gratuities, &c. Mr. Hewett is now 61 years of age, and therefore the medical certificate of incapacity for further service is not required in his case.—I have, &c.,

H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by A. G. Viegas, Esq.—

No. 7326. "That the question of Mr. Hewett's pension be referred back to the Commissioner, with a view to the Standing Committee being informed whether there are any special reasons why Mr. Hewett should have been retired from the Municipal service."

Carried.

No. 7327. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 15110, dated 25th ultimo, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Walsh, Lovett & Co., for the supply of pipes, fittings, &c., for the water works, whereby the contract period for the delivery of sluice valves and fire hydrants, and fittings and service pipes, shall be extended by one month and ten days, respectively."

Read letter No. 15506, dated 30th ultimo, from the Commissioner to the Secretary, as under :—

SIR,—With reference to the resolution of the Corporation, No. 6720, dated 15th instant, sanctioning the *immediate* carrying out of the sewerage works of the Umberkhari District, I have the honor to request the sanction of the Standing Committee to my obtaining

the stoneware pipes, junctions, and junction blocks as per statement marked **A**, and the cast-iron circular covers, frames and steps for manholes as per statement marked **B**, required for these works from Messrs. Richardson & Cruddas in continuation of their contract for the supply of stoneware pipes and covers and frames, &c., for manholes for the Colaba sewerage works, which were accepted by the Standing Committee in their resolutions Nos. 1347 of 10th May 1893 and 3128 of 5th July 1893. Their contract does not provide a rate for junction blocks and therefore the Special Drainage Engineer has fixed Rs. 3·380 for each, at which rate they agree to supply them. Their rate under a former contract was Rs. 3·844 each.

The contract for the Colaba sewerage works was accepted only four months ago and I do not think it necessary to lose time by inviting fresh tenders as there is no likelihood of our obtaining lower or more favourable rates.

All the preliminary arrangements for starting the work have been almost completed and tenders for earthwork, &c., will be invited within a fortnight's time.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 7328. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 15506, dated 30th ultimo, sanction be given to the purchase of the following articles for the sewerage works of the Umarkhari District, from Messrs. Richardson & Cruddas in continuation of their contract for the supply of stoneware pipes, &c., for the Colaba sewerage works, *viz.* (1) stoneware pipes, junctions and junction blocks as per statement **A** at a total approximate cost of Rs. 55,761·910, (2) cast-iron circular covers, frames and steps for manholes as per statment **B** at a total approximate cost of Rs. 15,405.

"That under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary as the Commissioner is desirous of saving time and as there is no likelihood of better or more favourable rates being obtained."

No. 7329. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 15500, dated 30th ultimo, and with reference to the resolution of the Corporation No. 5331, dated 7th September last, sanctioning the purchase of a stone-breaking machine at a cost of £ 603-15-6 through the agency of Col. Tulloch, R. E., sanction be given to that amount being remitted to Messrs.

Coutts & Co. in London to enable them to make payment as soon as the purchase is complete, as by this arrangement the Municipality will save 15 per cent. on the cost."

No. 7330. *Resolved*: "That the report of the Sub-Committee on the subject of the repair of the retaining wall of Walkeshwar Road, be referred back to the Sub-Committee for re-consideration in consultation with the Commissioner and the Executive Engineer."

No. 7331. *Resolved*: "That the following be *recorded*:—Letter No. 15118, dated 25th October 1893, from the Commissioner, reporting that he has sanctioned the renewal of the lease of the 17,000 square yards of reclaimed ground at Tardeo (leased to one Bissasur Bindraban for the purpose of stacking hay) for a period of one year from 29th December 1893 on the same terms as at present, *viz.*, Rs. 4,000 to be paid in four instalments."

No. 7332. *Resolved*: "That the following be circulated and brought on for consideration at a future meeting:—Letter No. 15162, dated 26th October 1893, from the Commissioner, on the subject of Mr. R. G. Walton's retirement on pension."

Considered the following :—

No. 2410 OF 1893-94.

BOMBAY, 10*th October* 1893.

TO THE COMMISSIONER.

SIR,—With reference to the sum of Rs. 3,56,652-4-10, provided in the current year's budget, at page 76, on account of interest and instalment on the consolidated Tulsi loan, I have the honour to report that out of that provision Rs. 1,78,326-2-5 were paid to Government on account of the half-yearly instalment due to them on 1st July 1893 in respect of the loan, and a further sum of Rs. 88,003-5-9 was paid, as sanctioned in Corporation's resolution No. 13956, dated 23rd March 1893, on account of the balance required to fully liquidate the loan, as we had raised a loan of only Rs. 42 lakhs from the Public against Rs. 42,88,003-5-9 actually due to Government on 1st July 1893. Thus there remained a net available balance of Rs. 90,322-12-8 out of the above-mentioned grant to meet interest payable on the 4 per cent. loan raised from the public.

2. The interest payable on the new loan of Rs. 42 lakhs for 6 months and 3 days of the year will amount to Rs. 85,380-11-7, thus leaving a net saving of Rs. 4,942-1-1 on the total provision of Rs. 3,56,652-4-10 for interest and instalment on the consolidated loan referred to in para. 1.

3. I further beg to report that the premia realized by raising from the public Rs. 42 lakhs at 4 % amounted to Rs. 49,024-11-0, out of which Rs. 24,188-2-0 have been paid for stamp, printing, advertisement, &c., charges in connection with the loan, leaving a surplus of 24,836-9-0. As this sum will not be required by us hereafter for the purposes mentioned in para. (2) (*a*) of the Corporation's resolution No. 5294, dated 19th November 1888, may I request the favour of your obtaining sanction of the Standing Committee and Corporation to the said amount being finally credited to Municipal revenue as an item of ordinary income instead of being credited to the loan as required by the above resolution.

4. I shall address you separately on the subject of the unappropriated balances of premia on the different Municipal 5 % Loans raised at premium, amounting to Rs. 1,16,419-5-3.—I have, &c., SORABJI NAVAROJI COOPER, Chief Accountant.

No. 14041 OF 11*th October* 1893.

Forwarded to the Standing Committee and Corporation for favor of sanction.—H. A. ACWORTH, Commissioner.

Resolved: "That, with reference to the Commissioner's memorandum, No. 14041 of 11th ultimo, to the Secretary, forwarding Chief Accountant's letter No. 2410 of the 10th idem and in supersession of paras. *a* and *b* only of their Resolution No. 5294 of 19th November 1888, the Corporation be recommended to sanction the following arrangements regarding the adjustment in the Municipal accounts of premia received on the raising of Municipal Loans from the public.

No. 7333.

"1. That the net balance after defraying cost of advertising, printing; stamping, brokerage and all other charges in connection with the issuing of debentures, be credited to the Municipal Fund.

"2. That such net balance or balances instead of being applied to ordinary expenditure or otherwise specially applied by order of the Corporation or appropriated towards the reduction of the amount of the next instalment of the loan then sanctioned to be raised, be kept in a separate fund and invested in public securities as a reserve to meet (*a*) losses on issue of the debentures for loans subscribed for by the public at a discount; (*b*) cost of advertising, printing, stamping, brokerage and all other charges in connection with the issue of debentures of loans subscribed for by the public at discount, at par, or at a rate of premium insuffi-

cient to provide for such charges ; (*c*) the cost of printing, stamping, advertising and all other charges arising in connection with the issue of debentures for loans issued either wholly or partly, in favour of the Corporation, as investments of sinking, insurance, worn-out mains renewal, surplush cash or other funds as may from time to time be sanctioned ; (*d*) the amount of premium payable on the investment of Sinking Fund in any year, in which such debentures cannot be issued at par, or when such premium cannot be met out of the margin allowed in the Sinking Fund instalment on account of such charges, including the investment of the said margin with interest accumulations."

Resolved : "That the consideration of the following be postponed until the Budget Estimates for 1894-95 are before the Committee :—Memorandum from the President forwarding letter to himself from the Honorary Secretary, Victoria Jubilee Technical Institute, dated 26th ultimo, requesting that the Municipal grant towards that institution may be increased from Rs. 10,000 to Rs. 20,000 per annum."

No. 7334.

It was agreed that the consideration of the following be postponed till the next meeting :—Letter No. 13898, dated 9th October 1893, from the Commissioner, forwarding reports from the Water and Executive Engineers on the bursts that have occurred on the Tansa 48″ and the Arthur Road 27″ mains since Tansa Water was admitted into the City.

Read letter No. $\frac{W}{4952}$ OF 1893-94.

BOMBAY, 17*th October* 1893.

TO THE COMMISSIONER,
through the Executive Engineer.

SIR,—I have the honour to report, as requested in your No. 13644 of the 5th instant, that the Tansa supply was closed at Tansa at 9 A. M. on the 24th ultimo and was turned on again at 9 A. M. on the 1st instant. The closure was required to effect small repairs to the duct itself and its fittings between Tansa and Bombay, such as, for example, the renewal of the yarn packings of the sluice valves, which, with the work done during the year, become worn out and cannot be renewed without the water being shut off. It is considered preferable that such minor defects should be allowed to accumulate for a year and then be repaired altogether rather than to have a large number of stoppages during the year of the Tansa supply. The work done during the week was an examination of the whole length of the masonry duct, so

that its condition inside might be ascertained, any defects relating to the walls or to the cement flooring might be made good, any roots which might be growing through the arches from outside might be cut off and injury to the masonry thereby prevented. All the air valves were also examined and where necessary the rubber rings were replaced. The cleansing valves on the line were examined and in one or two cases altered so as to be more efficient. In some cases where required the sluice gates were re-tarred. The work was undertaken at the end of the monsoon, when it was apparent that no serious accident to the duct from the rains might be anticipated. Preparatory arrangements had been made to undertake these minor repairs at any time the supply might be stopped by an accident so that a separate shutting off of the water would not have been called for on their account afterwards.—I have, &c.,—S. TOMLINSON, M. Inst. C. E., Water Engineer.

No. 10110 of 1893-94.

25th October 1893.

Forwarded to the Municipal Commissioner.—M. C. MURZBAN, Executive Engineer.

No 15174 *of 26th October* 1893.

Forwarded to the Standing Committee.—H. A. ACWORTH, Commissioner.

Resolved: "That the following be *recorded* :—Memo-
No. 7335 randum No. 15174, dated 26th October 1893, from the Commissioner, forwarding report from the Water Engineer regarding the Tansa water supply."

In accordance with notice, it was proposed by the Hon'ble Mr. Javerilal U. Yajnik—

1. "That the Commissioner be requested to furnish the
No. 7336. Committee with a full and detailed statement of all balances of Loans and Investments on account of current revenue as well as of Loan Works as they stood on the 31st October 1893.

"2. That the Municipal Commissioner be requested to report what work the staff for the detection and prevention of waste of water from Municipal and private pipes has done since the introduction of Tansa supply into the City and what quantity of water has been saved through the agency of that department."

The motion was seconded by K. M. Shroff, Esq., and *carried*.

Resolved: "That the following be *recorded* :—Memo-
No. 7337. randa Nos. 15164 and 15642, dated 26th ultimo and 1st instant, respectively, from the Commissioner, reporting, with reference to the resolution of the Committee, No. 4484, dated 3rd October 1888, the following transfers to the Municipal General Fund Pass Book, *viz.*, (*a*) from the 27 Lakhs Drainage and Water Works Loan deposit account, Rs. 1,198-7-0 ; (*b*) from the 7 Lakhs Sanitary Works Loan deposit account, Rs. 2,996-3-0 ; (*c*) from the Agripada House Sullage Water Connections Loan deposit account, Rs. 1,747-12-0 ; and (*d*) from the Surplus Cash deposit account, Rs. 56,457-14-11 on the 14th October 1893 ; ditto ditto Rs. 50,000 on the 18th idem ; and ditto ditto Rs. 50,000 on the 21st of the same; ditto ditto Rs. 48,039-12-6 on the 26th of the same.*

Read letter No. 15218, dated 26th ultimo, from the Commissioner to the Secretary as under :—

SIR,—With reference to the Standing Committee's Resolution No. 5533 of the 13th ultimo, I have the honor to report that the applicant referred to is one of the several Livery Stable-keepers who have been dissatisfied with the tax levied under section 180 of the present Municipal Act, and have been disputing it since it was first levied. He owns two stables, one at Picquet Road and the other at Chandanwady. He has paid bills up to 31st March 1893 in respect of the vehicles and horses found in the Picquet Road stable, but objects to the vehicles kept from time to time at the Chandanwady stable being charged with the tax, alleging that they were for sale, and not for hire, and, as such, exempt from the tax. The Ward Officers, however, at their periodical inspections found that the vehicles in the stable bore marks of being in use and, as such, they were liable to be taxed, section 181 (*g*), under which exemption is claimed, being applicable only to "vehicles kept by *bonâ fide* dealers in vehicles for sale merely, and not used." There were also horses in the stable. As Mr. Pestonji did not return the wheel tax schedules served on him, bills were issued in accordance with the number of taxable vehicles and horses found by the ward staff at their inspection.

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* The Chief Accountant reports to the Commissioner that the balances standing to the above account after effecting the transfers are as under :—

(*a*)	In 5 per cent.	Municipal	debentures	for	Rs.	48,000	...	Rs.	48,000	0 0
(*b*)	"	"	"		"	1,20,000	...	"	1,20,000	0 0
(*c*)	"	"	"		"	70,000	...	"	70,000	0 0
(*d*)	"	"	"		"	22,73,000	...	"	22,73,000	0 0
	In 4 per cent.	"	"		"	24,000	...	"	24,000	0 0
	Cash								48,039	12 6

The applicant's statement that the bills from April 1891 to March 1893 were all issued at once and not quarterly as they became due is incorrect, for the bills were issued as soon possible as they became payable, and were presented to him at various times. The demands in the bills which are legal have long since become final and cannot be modified.—I have, &c., H. A. ACWORTH, Commissioner.

No. 7338. *Resolved* : "That, with reference to the petition from Mr. Pestonji Edalji Shroff, the Corporation be furnished with copy of letter No. 15218 of 26th October 1893 from the Commissioner to the Secretary.

The following returns were read and *recorded* :—

No. 7339. Returns of fires at 324, Girgam Road, Ripon Road (Indian Manufacturing Co.), 150, Kamathipura 8th Lane, 123, Kamathipura Bazar Road, DeLisle Road (Union Mill), and 254, Borah Bazar Street, forwarded with the Commissioner's memoranda Nos. 15016 and 15363, dated 24th and 28th October 1893.*

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 29th October 1893.

No. 7340. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 15541, dated 31st ultimo, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,765-8-4 from savings in the grant for D, road repairs and maintenance, section 2, cart-hire, &c. (labour carts), to C, road watering, 1 and 2, establishment for watering, to meet excess on the latter head."

No. 7341. *Resolved* : "That the following be forwarded to the Commissioner for favour of remarks :—Letter to the President, dated 31st ultimo, from Mr. Dosa Jivan on the subject of his building in Lohar Chawl Street."

It was agreed that, on account of the Dewali Holidays, the next meeting of the Committee be held on Friday, the 10th instant, at 3 P.M.

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* *See* Appendix **C**.

† *See* Appendix **B**.

BOMBAY, 10*th November* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSHRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; the CHIEF ACCOUNTANT ; and the SECRETARY.

The minutes of the meeting held on the 1st instant, were signed.

The seal of the Corporation was affixed to the following :—2 attested duplicate debentures, Nos. 1247 and 3251, of the Bombay Municipal Loan of 1878, of Rs. 500 each ; 1 attested ditto ditto, No. 2581 N.N., of the Bombay Municipal Sanitary Works Loan of 1885, of Rs. 500 ; 1 attested ditto ditto, No. 9681-82, of the Tansa Water Works Loan, of Rs. 1,000 ; and 1 consolidated debenture of the Tansa Water Works Loan Nos. 2196 and 2197, of Rs. 500 each : to deeds of contract (1) with Messrs. Ruttonji Bezonji & Co. for the construction of quarters for the Fire Brigade Station at Colaba; (2) with Messrs. Tejoo Kaya and Tulsidas Khimji for the construction of a new road and a storm-water drain along it in Agripada (Morland Road) : and to deed of agreement between Mr. Dhanjibhai Kikabhai Gandevia and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property situated at Nos. 33 and 35, Bomanji Lane, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed, and at the rate of Rs. 40 per square yard for any land shown on the plan, to be there taken up, exclusive of any loss, damage or expense sustained by him by reason of such acquisition.

No. 7633. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 16098, dated 6th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of Owner.	Where.
Mr. Munchersha Ruttonji Mody ...	Building at Forjett Street."

Resolved : "That, as applied for by the Commissioner in his memorandum No. 16171, dated 7th instant, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 7634.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 15967, dated 4th instant, the Corporation be recommended to sanction the writing off of Rs. 3,756-6-6 from the live-stock return of the Health Department, being the book-value of 58 bullocks that died during the quarter ending 31st August 1893."*

No. 7635.

Resolved : "That, as applied for by the Commissioner in his letter No. 16038, dated 4th instant, sanction be given to the acceptance by him of the tender of Messrs. John Fleming & Co., the lowest of the ten tenders received for the supply of 1,500 casks of Portland cement, at the rate of Rs. 7-4-0 per cask, required for the Colaba sewerage and other drainage works. The cost to be debited proportionately to the works for which the cement is used."

No. 7636.

Read letter No. 15775, dated 1st instant, from the Commissioner to the Secretary, as under :—

SIR,—In answer to Standing Committee's resolution No. 7326 of 1st instant, given in the margin, I have the honour to point out that I have endeavoured to inform the Standing Committee in the course of discussion what the reasons were for retiring Mr. Hewett. I do not know whether the Standing Committee would regard them as general or special, but I will repeat them in writing. For the last year or two it has been obvious that Mr. Hewett, though a man of remarkable physical activity for his age, has been getting past his work. This is

"That the question of Mr. Hewett's pension be referred back to the Commissioner with a view to the Standing Committee being informed whether there are any special reasons why Mr. Hewett should have been retired from the Municipal Service."

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* *Causes of death*—9 general debility ; 1 thoracic dropsy ; 15 old age and general debility ; 1 jaundice ; 2 cystic lungs and liver ; 1 cancered horn ; 13 inflammation of heart, lungs, &c. ; 1 exhaustion due to injury ; 2 horn disease ; 1 dislocation of stifle joint ; 2 abscess in liver, 1 pneumonia ; 1 disorder of lungs ; 3 hoven ; 1 apoplexy ; 1 pleuro-pneumonia ; 2 disorder of liver and spleen ; 1 cystic enlargement of spleen. *Total* 58.

Where died, &c.—6 Bori Bander Stables, 44 Sankli Tank Hospital, 4 Forss Road Stables (D Ward), 3 Null Bazaar Stables, 1 Kamathipura Stables (N. B.) *Total* 58.

Quarterly percentage of losses on the whole strength (1,979) of bullocks, 2·9.

now the third year in which I have had the question of his retirement under my consideration, and it is not impossible that I might have come to my present conclusion last year if I had not been reluctant to deprive him of any advantage which he might obtain under the new pension rules, a consideration which his very long and meritorious service rendered peculiarly just in his case. The effect of his age upon Mr. Hewett has been discernible, less in any failure of physical capacity than in other particulars, a deficiency of vigour and receptivity of mind and want of resource in any case taking him out of the beaten track of his ideas. He is certainly no longer fit for the appointment he has held, which involves more work in office than any appointment in the Water Works Department, excepting only that of the Engineer. These are the reasons, and the only reasons, for retiring Mr. Hewett. I may add that I should not think of retiring him or any officer merely because he had reached a particular age, if he was still equal to his work, being, I hope, perfectly alive to the impropriety of imposing needless additional charges on the pension roll.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. Fazulbhoy Visram—

"That, with reference to letters Nos. 15582 and 15775, dated 31st ultimo and 1st instant, respectively, from the Commissioner to the Secretary, and under the terms of the Pension Regulations 15 (*c*), sanction be given to the payment of a monthly pension of Rs. 150 to Mr. C. J. Hewett, Chief Inspector, Water Works Department, from 1st October 1893. That, under regulation 15 (*d*) of the same, sanction be also given to a good service pension to him of Rs. 25 per mensem from the same date."

Amendment, proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That Mr. C. J. Hewett, late Chief Inspector, Water Works, be granted an ordinary pension of Rs. 150 per mensem from the 1st October last."

No. 7637.

On a division, there were 6 votes *for* and 6 votes *against* the *amendment*, which was *carried*, as a substantive motion, by the casting vote of the Chairman.

No. 7638. *Resolved* : "That, as applied for by the Commissioner in his letter No. 15676, dated 1st instant, sanction be given to the payment of Rs. 8-4-0 to Mr. Kasinath Dewji, of the Water Works Department, being the amount of victoria hire paid by him on 30th and 31st August last, while in search of divers on the occasion of the burst of the 24" Vehar main. The amount to be met from the budget grant, Water Works contingencies."

No. 7639. *Resolved* : "That, as applied for by the Commissioner in his letter No. 15764, dated 1st instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Sittaram Luxmon & Bibra for constructing engine and boiler houses at Love Grove, whereby the deductions made from their bills to make up the 10 per cent. retention on the contract amount may be calculated on the total amount of the work executed by them, and the value of the materials supplied by the Municipality may be eliminated from such calculations."

Considered the following :—

No. 2820 OF 1893-94.

7th November 1893.

To THE COMMISSIONER.

SIR,—With reference to your No. 15556, dated the 31st ultimo, I have the honor to forward herewith, for the information of the Standing Committee, a statement showing the unexpended balances of the different loans raised from time to time and of the investment of the Loan and Surplus Funds as standing in our books on the above date.—I have, &c.,

SORABJI NAVAROJI COOPER,
Chief Accountant.

No. 16196 OF 1893-94.

8th November 1893.

Forwarded to the Municipal Secretary for the information of the Standing Committee (Resolution No. 7336, dated 1st instant).

H. A. ACWORTH, Commissioner.

Statement showing the balances on 31st October 1893 of Investments of Loan and Surplus Funds.

Particulars of Loans.	Amount of Loans raised.	Amount expended up to 31st October 1893.	Balance.	How invested.				TOTAL.
				In 4 per cent. Govt. Paper		In 5 per cent. Muni. Deb. at par.	In 4 per cent. Muni. Deb. at par.	
				Nominal value.	Actual cost.			
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. 27 lakhs Drainage and Water Works Loan ...	26,94,000 0 0	26,46,620 8 7	47,379 7 5	.....	.....	48,000 0 0	.....	48,000 0 0
2. 44 lakhs Sanitary Works Loan	44,00,000 0 0	39,70,706 8 11	4,29,293 7 1	4,74,000 0 0	4,63,914 14 5	.....	.....	*4,63,914 14 5
3. 7 lakhs Sanitary Works Loan	7,00,000 0 0	5,95,009 13 4	1,04,990 2 8	.....	.....	1,20,000 0 0	.....	†1,20,000 0 0
4. 12 lakhs Drainage and Water Works Loan ...	12,00,000 0 0	9,68,946 1 6	2,31,953 14 6	2,35,000 0 0	2,34,118 12 0	.....	.....	2,34,118 12 0
5. Miscellaneous Works Loan of Rs. 10,08,500	10,08,500 0 0	**6,52,348 7 7	3,56,151 8 5	1,00,000 0 0	99,625 0 0	‡	.....	‡99 625 0 0
6. Agripada House Sullage Water Connections Loan of Rs. 2,48,000	2,48,000 0 0	2,22,025 3 2	25,974 12 10	.....	.....	70,000 0 0	.....	§70,000 0 0
7. Municipal Building Loan of Rs. 8 lakhs	8,00 000 0 0	6,57,378 10 6	1 42,621 5 6	.....	.....	3,45,000 0 0	.....	§§3,45,000 0 0
8. 4½ lakhs Loan for Fire Brigade Quarters & Stations.	2,50,000 0 0	89,232 7 11	1,60,767 8 1	.....	.....	.....	2,23,000 0 0	††2,23,000 0 0
Rs. ...	1,18,00,500 0 0	98,01,367 13 6	14,99,132 2 6	8,09,000 0 0	7,97,658 10 5	5.83,000 0 0	2,23,000 0 0	16.03,658 10 5
9. Surplus Cash	... ...	.....	.....	.....	.....	22.73,000 0 0	24,000 0 0	22,97,000 0 0
			Total Rs. ...	8,09,000 0 0	7,97 658 10 5	28.56 000 0 0	2,47,000 0 0	39,00,658 10 5

* Out of this lot, Paper for Rs. 34,500, being the amount advanced from surplus cash to meet expenditure on the 1st Drainage Section House Connections, &c., Works, will be sold when required for our current expenditure.

† Out of this sum, Debentures for Rs. 15,000 will be transferred to surplus cash on the 10th instant to replace advances made for expenditure on the Fort Drainage Works.

‡ Excluding advances of over Rs 2½ lakhs made out of this loan for certain other works sanctioned by the Corporation, which will be replaced as soon as the necessary loans are raised on account of such works.

§ Out of this sum, Debentures for Rs. 44,000 will be transferred to surplus cash on the 10th instant to replace advances made for expenditure on the Agripada House Connections Works.

** Excluding Rs. 53,848-11-11 paid out of premia, as sanctioned by the Corporation, to meet excesses on the cost of land purchased for the Colaba Market and on the extension of the Erskine Road Markets.

§§ Out of this sum, Debentures for Rs. 2,02,000 will be transferred on the 10th instant to surplus cash to replace advances made for the construction of the Building.

†† Out of this sum, Debentures for Rs. 62,000 will be transferred on the 10th instant to surplus cash to replace advances made for the construction of the Fire Brigade Quarters.

Resolved: "That memorandum No. 16196, dated 8th instant, from the Commissioner, be printed on the proceedings of this day's meeting."

No. 7640.

Considered the following :—

No. 16152 OF 1893-94.

BOMBAY, *6th November* 1893.

To THE MUNICIPAL SECRETARY.

SIR,—The Executive Engineer, Presidency, has applied for information as to the rate that would be charged for water if used for watering the ground around the Bandstand, which, he states, though maintained by Government, is entirely given for public recreation. The rate ordinarily applicable in this case is annas 10 per 1,000 gallons as charged to Government properties, but I think that this should be considered as a case similar to that of the Chowpati and the University Gardens, for which the Standing Committee have lately sanctioned a lower rate. I have the honor, therefore, to suggest that the same rate may be charged for water used on the ground in question, *viz.*, a compounded rate equal to the value of water consumed at 4 annas per 1,000 gallons.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved: "That, as applied for by the Commissioner in his letter No. 16152, dated 6th instant, sanction be given to a compounded rate equal to the value of water consumed at 4 annas per 1,000 gallons being charged to Government for water used for watering the ground around the Bandstand."

No. 7641.

Resolved : "That privilege leave for two months from the 16th instant be granted to Mr. Vinayek Bhasker, clerk in the Standing Committee and Corporation's Office.

No. 7642.

"That sanction be also given to the employment of a substitute on Rs. 30 a month during applicant's absence, the charge to be debited to savings in the grant of fees payable to members of the Committee."

It was agreed that the consideration of the following be postponed till next week :—Resolution of the Corporation, No. 7601, dated 6th instant, as under :—

"That the report of the Committee appointed to arrange, in consultation with the Commissioner, for the provision of a retiring room and library for Councillors be approved and adopted.

"That, on the recommendation of the Standing Committee, the Corporation will sanction the necessary expenditure in the matter."

Considered the following :—

No. 13898 OF 1893-94.

BOMBAY, *9th October* 1893.

To THE CHAIRMAN, STANDING COMMITTEE.

SIR,—I have the honor to forward reports from the Water and Executive Engineers on the bursts that have occurred on the Tansa 48″ and the Arthur Road 27″ main since Tansa water was admitted to the City. They have been 13 in all, and 10 of these have been south of what Mr. Tomlinson calls "the comparatively low summit "in Soparibag Road." The other three, which were north of this point, are all susceptible of easy explanation. The first, on 3rd March 1892, close to the Ghatkopar syphon-head, was pretty certainly due to flaw or weakness in the pipe ; the next, on 6th May 1892, was the result of careless work during the construction of a culvert ; and the third, on 21st May 1892, was the case in which the pipe had been laid over an old well and not properly bedded. It is probable on the evidence that, of the remaining ten, the failure in the 48″ main is in some cases partially attributable to faulty work in laying the pipe, but this cannot apply to the 27″ Arthur Road main which had been working for four years without mishap before the Tansa works were opened. Both Engineers, it will be observed, are of opinion that air is the principal peccant factor ; though they differ slightly as to the origin of it, they are agreed as to the results and are agreed in recommending a larger provision of air-valves or air-escapes, which Mr. Tomlinson proposes to place 300 feet apart from Elphinstone Road to Chinchpokli. There can, I presume, be no doubt as to accepting this proposal, and I have sanctioned the purchase of 20 air escapes at Rs. 76-8-0 each from Messrs. Richardson & Cruddas, and request the Standing Committee will authorize me to dispense with invitation for tenders. Quotations were asked from other firms, but this was the lowest. Mr. Tomlinson also advises strengthening the sockets with steel hoops ; but Mr. Murzban prefers, and I am disposed to agree with him, to defer this work for the present.—I have, &c., H. A. ACWORTH, Commissioner.

No. 8572 OF 1893-94.

BOMBAY, *26th September* 1893.

To THE COMMISSIONER.

SIR,—With reference to your No. 7088, dated 7th July 1893, I have the honour to forward the accompanying letter No. $\frac{W}{2899}$, dated 14th July 1893, from the Water Engineer, together with copies of the correspondence marginally noted.

This Office No. 5858, dated 27th July 1893, to the Water Engineer.
No. 8331, dated 31st July 1893, from the Water Engineer to this office.
No. 7401, dated 30th August 1893, from this office to the Water Engineer.
No. 4235, dated 13th September 1893, from this office to the Water Engineer.

2. It appears that up to date 13 bursts have occurred in the Tansa mains south of Ghatkopar, as shewn in the accompanying

statement marked A, and the longitudinal section of the Tansa 48″ main south of Ghatkopar, and the plan showing the Arthur Road 27″ main. Ten of these were in the 48″ main, and the remaining three on the 27″ Arthur Road main. The first six bursts, all in the 48″ main, occurred between the 3rd of March and 18th of July 1892, a period of 4½ months, during which the main was first charged and the head of water in it gradually raised to its full extent, as shewn by the register of the pressure of water at the Kurla sluice-house.

3. In the first five bursts, the interval of time between two successive occurrences varied from 14 to 27 days, while the sixth burst occurred nearly two months after the one preceding it. The sixth burst was the last during the period the works were in charge of the Tansa establishment, and some time prior to it the water in the main was raised to its full head at or near which it was maintained, until the works were taken over by the Deputy Executive Engineer, Water Works, in November 1892.

4. The first six bursts may be attributable to the fact of the 48″ main having been charged for the first time and the pressure in it raised. It is well known that, when new mains are charged for the first time, all defective pipes which may have remained undetected at the time of testing them, and also those which may anywise have been injured at the time of laying, give way at the time of filling them in or increasing the pressure in them.

5. With such arrangements as those now existing for the abstraction of air (which, as explained by Mr. Tomlinson, plays such an important part in causing these bursts) it is difficult to assign positively to any cause or causes the failures in the pipes after the first full flow of water. They may be accounted for in the manner explained by Mr. Tomlinson, but there are other causes also to which I may allude.

6. Under the former arrangement, water was occasionally admitted from the Tansa duct into the Vehar Lake. That was probably done to avoid a sudden abnormal rise of water in the ducts and to prevent a large variation in the head of pressure in the main. This arrangement has, I believe, been altered since the beginning of December 1892. The water is now admitted every night into the Vehar Lake without any regard to the level of water either in the duct or the main, and this creates a sudden and heavy rise and fall in the level of water in the 48″ main at its Ghatkopar end. When there is a heavy fall in the level of the water in the main, there would naturally be a great rush from the conduit into it, which would draw in a large volume of air with it. The air being highly compressible causes the water to oscillate with every variation of the head, and the greater its variation the greater is the oscillation. At the free or upper end of the main, the force of the oscillation exhausts itself, but at the other or lower end, the resistance of the unyielding dead walls of the main

causes an impact, the force of which either bursts the main at once, or weakens it more or less, according to the amount of its energy, the least of which must be formidable on account of the very large mass of water contained in the main.

7. Bearing in mind the natural consequence of the present system of nightly admission of water in the Vehar Lake, I have come to the conclusion that the 7th, 9th and 11th bursts, all on the south of the last air-cock on the Soparibag Road, were due to the combined effect of the gradual accumulation of the air drawn into the main by the rush of water at the Ghatkopar end and the incessant variation of the water head ; and the remaining four, which occurred on the Soparibag and the Arthur Roads, very shortly after the repair of these three last bursts, were due to the combined effect of the air which had from the breach filled the main when emptied for repair (a great portion of which may have remained in it even after the full quantity of water was let in after the repair) and the variation of the head.

8. From the past occurrences it appears that these bursts take place at intervals of about three months, and if everything had remained as it was before, a burst might have been expected at about the beginning of November next. But I notice from the reading of pressures in the gauge at Kurla that it is now kept nearly uniform, and if this continues, there is not much likelihood of bursts taking place as frequently as before.

9. There are other mains of the same bore and thickness of metal on the Tansa duct, which also are subjected to a head of water at least equal to that which prevails in the main from Ghatkopar southwards. They differ only in this respect, that the former have in them a uniform water-head and are therefore free from bursts.

10. There is a 48″ outlet main from Bhandarwada, in which also the head varies, but the mass of water, as well as the variation in it, is comparatively small and no bursts have, I believe, taken place in it.

11. It is possible that the 11th burst was expedited by the raising of the water-head in the main from 1st July up to the time of the burst on the 5th idem. The cause of this heavy rise of head is explained in the 2nd para. of Mr. Tomlinson's letter, No. 3331, dated 31st July 1893, and in his No. 4235, dated 13th September 1893.

12. The fixing of some additional air-cocks to the main in the Soparibag and Arthur Roads might serve to deaden the effect of the impact on that part of the main, but they will not remove the cause until measures are adopted to reduce effectually the variation in the water-head, as far as practicable, by keeping the pressure uniform as is being done now.

13. I entirely agree with Mr. Tomlinson that more escapes should be provided, and until this is done, and it is found that they

have no effect in stopping or reducing the bursts, I would not put the steel hoops on the socket joints. These hoops will no doubt strengthen the joints, but they will not, in my opinion, prevent the bursts which must take place in other parts of the pipes, if they are not sufficiently strong to withstand the force of the impact of water.—I have, &c., M. C. MURZBAN, Executive Engineer, Municipality.

No. $\frac{W}{2899}$ OF 1893-94.

BOMBAY, 14*th July* 1893.

TO THE COMMISSIONER,

Through the Executive Engineer.

SIR,—I have the honor, in returning your No. 7088 of the 7th instant, to submit a report on what appears to me to be the cause of the bursts on the Soparibag Road section of the Tansa main.

2. In this office No. 6453, dated 25th February 1893, and No. 6895, dated 16th March 1893, on the same subject, I reviewed all the forces at work so far as known, and the tenor of the report was that the fractures were due in part to bad bedding and want of care in refilling, and that it appeared as if air within the pipes had contributed to the fracture on the 18th February following the one on the 14th February.

3. In the case of the burst on the 5th instant, I can attribute no cause from the outside, the bedding being unobjectionable so far as could be determined when the broken pipe was removed.

4. The pipes, $1\frac{1}{8}''$ in thickness, are I think sufficiently strong, but are not perhaps so heavy as some Engineers would have used, but that they have stood the maximum pressure beyond Matunga supports the view as to their being sufficiently strong.

5. The changes of pressure, which are inevitable, and the varying length of partly filled pipe at the Ghatkopar siphon-head have produced no ill effects on the Ghatkopar section, nor do they generally in the City.

6. The whole of the sluices on the Tansa line and in the City are of such a kind as to prevent the creation of appreciable water ram or shock when opening or closing and no bad effects have hitherto been attributed to any of them.

7. The pipes, which have failed since November last, are known to have been tested here : their subsequent injury in handling is possible,

but there is no proof of it. The sockets may have been over caulked setting up undue strain tending to fracture the pipe ; whether this be so or not is not capable of proof by any process known to me.

8. It will thus be seen that there are possible causes, whose existence is incapable of proof and any one or more of these may be present to assist others ; each of which may be incapable in itself of producing fracture.

9. Such a series of fractures is very unusual and I think only accumulated evidence would justify the conclusion I have arrived at, *viz.*, that the accumulative cause is free air. An examination of the section attached hereto shews that the seven bursts on the 48" main south of Elphinstone Road have been at or on the Bombay side of the comparatively low summit in Soparibag Road. As you are aware water in its natural condition contains at all times a considerable quantity of air, the quantity increasing with the pressure and its recoiling power also increasing with the pressure. This is one of the reasons for providing air-vessels on pumping engines so that the additional quantity of air for the increased pressure may be afforded and preserve that elasticity in the combined water and air which would be wanting in water without air, which is practically incompressible, and would become dangerous and unmanageable. Such a state of affairs necessitates the provision at summits of siphons of arrangements for abstracting the air which is there liberated under reduced pressure, and such, to come to the case in question, is the cause of air-valves or escapes being provided at summits of water mains, more especially carrying mains having no connections taken off.

10. The provision of air-valves and taps was not overlooked in this case, for there are two taps always kept partially open on the summit in Soparibag Road as shewn on the tracing and air-valves as elsewhere shewn.

11. My view is that air gradually accumulates and that the taps are not sufficient or suitable for its discharge ; that when a sufficient quantity has collected it begins to interfere with the capacity of the water, disturbing the even flow of water, and bringing about a series of convulsions which must end in relief somehow. This relief may be found in the fracture of a pipe in the summit section, or in the air being carried forward by the velocity of the water until it either accumulates again to renewed mischief or

finds escape through taps of consumers. Those who have a pumping supply or have noticed the milky appearance of water drawn after a main has been newly charged, will realise something of the condition of affairs inside the main.

12. Mr. Clerke was very careful in this matter and as he is not here I think I am bound to assume the responsibility for the present arrangements ; for Mr. Clerke, having some doubt as to whether air-escapes were at all necessary on such small summits, mentioned the matter to me, and I said I should put them on. What was done was, therefore, what I suggested, and if I had pressed for more I think Mr. Clerke would have provided them. In a recent letter I had written to Mr. Clerke that the bursts were difficult to explain and I could only suggest more air-valves, and Mr. Clerke's reply was to the effect that he knew of no apparent cause and thought additional air-escapes might be required.

13. With a view to obviate the accumulation of air I propose to fix air-escapes of design attached at each 300 feet (about) from Elphinstone Road to Chinchpokly Station, and if this does not put an end to the trouble, I, on present evidence, should advise the strengthening of the sockets with steel hoops as has been done in some places, for the sockets always fail, being the free end, and if they could be kept intact, I do not think the forces at work would be able to cause a continuance of serious trouble.

14. I should, I think, in conclusion say that so far as the securing of watertightness of joint is concerned, the socket adopted by Mr. Clerke is the best known ; but absolute watertightness carries with it and involves the impossibility of air escaping from the pipe through the joint, which is possible with the older type of joint and may have had more effect in practice than we have realized. The necessity of ample air escapes is therefore intensified.

15. The two bursts on the Arthur Road 27″ main, which has been at work for four years under all pressures and given no trouble, can only, I think, be attributed to the action of air forced forward from the 48″ main which was charged on Thursday, 6th July, about 3-30 P.M., and the failures on the 27″ occurred one at 7-15 P.M. the same evening, when the pressure was comparatively low, and the other at 10-45 the next morning (7th July), when the pressure was full.—I have, &c.,—S. TOMLINSON, M. INST. C. E., Water Engineer.

Statement of Bursts that have occurred up to date in the Tansa Mains from Ghatkopar Southwards.

Serial No.	Date of Burst.	Interval between the bursts.	Distance in feet from the syphon-head at Ghatkoper.	Location of Burst.	Remarks.
1	3-3-1892	.....	2,650	.....	This appears to have occurred at the time water was first let into th main and at a place where there is a sharp gradient of 1 in 25 after a dead level.
2	26-3-1892	23 days.	47,700	Near the Photometer house in Arthur Road.	This appears to have occurred about the time the water first reached the other end of the main.
				The Tansa Water Works were opened after these two bursts, i.e., on 31st March 1892.	
3	9-4-1892	14 days.	47,300	Near the Tramway Terminus.	The pressure in the main during the previous 24 hours at the Kurla Gauge varied between 26 and 49 lbs.
4	6-5-1892	27 days.	12,493	Careless work near Ghatkopar.	Do. do. do. 32 and 53 lbs.
5	21-5-1892	15 days.	38,494	Near Naigam Cross Road ...	Do. do. do. 44 and 66 lbs.
6	18-7-1892	58 days.	47,900	On the Arthur Road ...	Do. do. do. 82 and 85 lbs.
				On 1st November 1892 the Charge of the Tansa Water Works was taken over by Mr. Tomlinson.	
7	14-2-1893	211 days.	45,350	Soparibag Road south of the last air-cock on the 48" main, near Choregali	The pressure varied between 34 and 85 lbs.
	18-2-1893	4 days.	43,600	Soparibag Road north of the last air-cock.	The pressure varied between 70 and 80 lbs.
9	20-5-1893	91 days.	.....	Do. near the Chinchpogli Station.	This was the first burst in the 27" Arthur Road main. The pressure varied between 32 and 76 lbs. The burst occurred at 5 A.M. on the day and was repaired at about 8 A.M. on 23rd May 1893.
10	25-5-1893	4 days.	46,600	Soparibag Road south of the last air-cock.	The pressure varied between 17 and 51 lbs.
11	5-7-1893	41 days.	45,200	Soparibag Road south of the last air-cock.	The pressure varied between 50 and 84 lbs. and it was unusually high in the main during certain part of the day from 1st July up to the time of the burst which was repaired at 5 P.M. on 6th July 1893.
12	6-7-1893	1 day.	.....	Arthur Road ...	Burst occurred in the 27" main at about 7-40 P.M. It was repaired at midnight on the following day.
13	7-7-1893	1 day.	.....	Do ...	Burst occurred in the 27" main, at about 10 A.M. It was repaired on the following day.

M. C. MURZBAN, F.R.I.B.A., A.M.I.C.E.,
Executive Engineer, Municipality.

Resolved: "That the following be *recorded*:—Letter No. 13898, dated 9th October 1893, from the Commissioner, forwarding reports from the Water and Executive Engineers on the bursts that have occurred on the Tansa 48″ and the Arthur Road 27″ mains since Tansa water was admitted into the city."

No. 7643.

Read the following:—

No. 2724 of 1893-94.

BOMBAY, 31*st October* 1893.

To THE COMMISSIONER.

SIR,—In continuation of this office No. 2211, dated 26th ultimo, I have the honour to inform you that an additional grant of Rs. 30,000 will have to be obtained to meet the total probable law expenses up to the end of the year as under:—

Bills already received in this office and remaining unpassed owing to the whole year's grant of Rs. 18,000 having been expended	Rs.	10,000
Bills under preparation in the Solicitor's office for charges incurred up to the end of October 1893 ...	„	15,000
Charges likely to be incurred up to the end of February 1894	„	5,000
Total	Rs.	30,000

2. The above large excess appears to be principally due to the annual Budget provision being insufficient to defray the law expenses incurred annually. Thus unpaid bills for one year have been transferred to another. These accumulations of the past several years and the heavy expenses incurred in defending appeals filed by rate-payers against our assessments, have helped to swell the excess on the law charges grant to Rs. 30,000, as stated in the preceding para.—I have, &c.,

SORABJI NAVAROJI COOPER, Chief Accountant.

No. 15658 of 1893-94.

1*st November* 1893.

Forwarded to the Standing Committee and the Corporation for favour of sanction. A full report will duly be submitted.

A surplus of Rs. 7¾ lakhs has been ascertained since the closing of the accounts for 1892-93. Out of this sum, additional grants, aggregating Rs. 1,12,635-0-6, have been sanctioned, and an expenditure of Rs. 19,528 has been recommended for sanction.

H. A. ACWORTH, Commissioner.

Resolved: "That memorandum No. 15658, dated 1st instant, from the Commissioner be *recorded* until he is in a position to place a full report on the subject before the Committee."

No. 7644.

Resolved: "That the following be referred to the Commissioner for favor of remarks:—Letter, dated 6th instant, from Mr. Noor Mahomed Jairajbhoy Peerbhoy, complaining of alleged serious nuisance existing adjoining his property at Foras Road."

No. 7645.

The following return was read and *recorded*:—

Return of fires at Parel Road (Byculla), 13, Carpenter Street (Mazagon), and Victoria Dock, forwarded with the Commissioner's memorandum No. 15870, dated 2nd November 1893.*

No. 7646.

The following statement † was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 5th November 1893.

Resolved: "That memorandum from the President, forwarding letter to himself from the Honorary Secretary, Victoria Jubilee Technical Institute, dated 26th ultimo, be considered in connection with the Budget Estimates."

No. 7647.

THE CONSIDERATION OF THE BUDGET ESTIMATES OF INCOME AND EXPENDITURE FOR THE YEAR 1894-95 WAS PROCEEDED WITH.

Proposed by the Hon'ble Mr. R. G. Oxenham, seconded by E. B. Carroll, Esq.—

"That the Expenditure side of the Budget be first considered."

Lost, the votes being 3 *for* and 6 *against*.

The consideration of the Estimates of Income was then proceeded with.

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* See Appendix C. † *See* Appendix B.

In his "Introduction" the Commissioner wrote :—

"OPENING BALANCE.

"The opening balance is estimated at Rs. 19,50,000 after providing for all grants sanctioned and likely to be sanctioned for the year 1893-94. The details are as under :—

Estimated closing balance at page 5 of Budget for 1893-94		Rs. 13,15,332
Actual opening balance in excess of the estimated balance on 1st April 1893 (see pages 73 to 76 of the Administration Report for 1892-93)		„ 7,75,000
Interest and profit on Loan and Surplus Fund Investments to be received in excess of the Budget Estimate for the current year		„ 41,000
Net premium received on the 4 per cent. loan of 42 lakhs raised this year for the repayment of the Government consolidated loan bearing interest at 4½ per cent.		„ 24,836
Savings on debt and other grants for the current year		„ 1,00,000
		Rs. 22,56,168
Deduct—Anticipated falling off in the current year's estimate of water revenue	Rs. 60,000	
Grants from cash balance sanctioned up to 1st November 1893, exclusive of advances for Loan Works, Stock, &c.	Rs. 1,11,089	
Add—Reserved for probable extra grants to end of the current financial year	„ 1,35,079	
	Rs. 2,46,168	
		Rs. 3,06,168
Opening balance for 1894-95, including the 1 lakh required by law		Rs. 19,50,000

"This balance of Rs. 19½ lakhs is proposed to be utilized as follows :—

Reserve balance as required by the Municipal Act...	Rs.	1,00,000
To meet the deficit in 1894-95 on account of increased Police charges, &c.	„	4,00,000
To keep invested as surplus balance to meet similar deficits in 1895-96 and subsequent years until the ordinary revenue has overtaken the ordinary expenditure.....	„	14,50,000
	Rs.	19,50,000

"The opening balance on 1st April 1894 in excess of estimated balance does not imply any normal increase of revenue or reduction of expenditure which can be taken into account in yearly estimates ; a careful study of the present and past Budgets will show that the regular revenue is increasing but slowly. It is disappointing to observe this in the case of the water revenue, which during the current year is materially below what was hoped for. The rapid progression of this head of revenue in the few past years had generated expectatations which have proved too sanguine. In spite, therefore, of the large balances shown by the above statement, it does not seem possible, in prudence, to reduce any item of taxation. This could only be justified by the fact that normal revenue had overtaken, or nearly overtaken, normal expenditure, which is far from being the case. The balance should still, for the most part, be guarded to tide over the period till that time arrives, though a portion is proposed in the coming year to be utilized to provide for new works of established necessity in excess of the usual allotment under that head.

"Thus, the total revenue is estimated to be Rs. 54,680 in excess of the current year's estimate."

The estimate of income for the year 1894-95 from the General Tax at 8 per cent. (including contributions of Rs. 96,767 from Government and Rs. 1,53,904 from the Port Trust) was passed at Rs. 17,18,588."

(*The estimate for the current year is Rs.* 16,91,855.)

The estimate of income for the year 1894-95 from additional tax under section 140 (*c*) of the Municipal Act for Fire Brigade charges at ½ per cent. (including Rs. 9,619 from the Port Trust and Rs. 6,048 from Government) was passed at Rs. 1,07,412.

(*The estimate for the current year at ½ per cent. is Rs.* 1,05,741.)

The estimate of income for the year 1894-95 from Wheel Tax, as per schedule G* of the Municipal Act, was passed at Rs. 3,45,850 (including toll of 2 annas per vehicle to be levied on all vehicles entering the city from Salsette, which are not liable to the tax leviable under section 180 of the Municipal Act).

* SCHEDULE G—*See Section* 180.

Description of Vehicle or Animals.	Maximum amount of tax per quarter. Rs. a. p.
Each four-wheeled vehicle, drawn or impelled by horses, ponies, mules, donkeys, bullocks, or machinery.. ..	5 0 0
Each two-wheeled vehicle, drawn or impelled by horses, ponies, mules, donkeys, bullocks, or machinery.. ..	3 0 0
Each vehicle, drawn or impelled otherwise than by horses, ponies, mules, donkeys, bullocks, or machinery.	2 0 0
Each horse, pony, or mule, of a height of 12 hands or upwards	6 0 0
Each horse, pony, or mule, of a height of less than 12 hands	2 0 0
Each bullock or buffalo kept for draft or pack purposes..	1 0 0
Each donkey kept for draft or pack purposes or for riding	1 0 0

(*The estimate for the current year* is *Rs.* 3,28,324.)

Proposed by A. G. Viegas, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

" That the estimate of income for the year 1894-95 from Town Duties be passed at Rs. 7,74,000 and at the following rates :—

	Rs. a. p.
Grain of all sorts, per candy	0 2 0
Flour of all sorts, 75 per cent. of the rate at the time being levied on the grain from which the flour is prepared.	
Wines and Spirits, per imperial gallon	0 4 0
Beer, per imperial gallon	0 0 6
Sugar, Mollasses and Goor, per cwt.	0 8 0
Ghee, per Bombay maund	0 8 0
Timber, excluding Railway sleepers, 2½ per cent. on market value.	
Firewood, per candy	0 1 0"

Amendment, proposed by E. B. Carroll, Esq., seconded by the Hon'ble Mr. Fazulbhoy Visram—

" That the estimate of income for the year 1894-95 from Town Duties be passed at Rs. 9,00,000 and at the following rates as proposed by the Commissioner :—

	Rs. a. p.
Grain of all sorts, per candy	0 4 0
Flour of all sorts, 75 per cent. of the rate at the time being levied on the grain from which the flour is prepared.	
Wines and spirits, per imperial gallon	0 4 0
Beer, per imperial gallon	0 0 6
Sugar, Molasses and Goor, per cwt.	0 8 0
Ghee, per Bombay maund	0 8 0
Timber, excluding Railway sleepers, 2½ per cent. on market value.	
Firewood, per candy	0 2 0"

On a division, the *amendment* was *lost*, the votes being 5 *for* and 7 *against*. The original motion was *carried*, the votes being 7 *for* and 5 *against*.

(*The estimate of income for the current year is Rs.* 9,00,000.)

The estimate of income for the year 1894-95 from Licenses for Dangerous and Offensive Trades was passed at Rs. 50,000.

(*The estimate for the current year* is *Rs.* 50,000.)

The estimate of income for the year 1894-95 from Licenses to Surveyors and Plumbers (Streets and Buildings) was passed at Rs. 2,900.

(*The estimate for the current year is Rs.* 2,850.)

The estimate of income for the year 1894-95 from Licenses for Land Conveyances, Music, &c., issued by the Commissioner of Police, was passed at Rs. 28,000.*

(*The estimate for the current year is Rs.* 24,000.)

The estimate of income for the year 1894-95 of receipts from Government, under the terms of Bombay Act V of 1878, in lieu of Liquor Licenses, was passed at Rs. 1,43,750.

(*The estimate for the current year is the same.*)

The estimate of income for the year 1894-95 of receipts from Government for the Municipal duty on Tobacco under Act IV of 1857 was passed at Rs. 1,87,000.

(*The estimate for the current year is Rs.* 1,82,000.)

The estimate of income for the year 1894-95 from Halal-khor Tax at 3 per cent. and as charged for special service was passed at Rs. 6,00,000.

(*The estimate for the current year is Rs.* 5,74,000.)

The estimate of income for the year 1894-95 from Water Tax at 4 per cent. and at special rates was passed at Rs. 13,00,000, including the charges for water supplied for Municipal purposes.

(*The estimate for the current year is Rs.* 13,25,000.)

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* Land Conveyance Licenses... ... ... Rs. 14,180
Music Licenses ... ... „ 11,000
Sundry „ ... ... „ 2,820

Rs. 28,000

The estimate of income for the year 1894-95 from Market Receipts was passed at Rs. 3,65,600.

(*The estimate for the current year is Rs.* 3,61,000.)

The estimate of income for the year 1894-95 from Public Gardens was passed at Rs. 7,000.

(*The estimate for the current year is Rs.* 6,700.)

The estimate of income for the year 1894-95 from Tramway Rent was passed at Rs. 38,000.

(*The estimate for the current year is Rs.* 36,200.)

The estimate of income for the year 1894-95 from Miscellaneous Fines was passed at Rs. 8,000.

(*The estimate for the current year is Rs.* 7,000.)

The estimate of income for the year 1894-95 from Miscellaneous Receipts was passed at Rs. 1,25,000.*

The estimate for the current year is Rs. 1,20,000.)

The estimate of income for the year 1894-95 from Miscellaneous Fees was passed at Rs. 50,000.†

(*The estimate for the current year is Rs.* 40,300.)

The estimate of income for the year 1894-95 from Miscellaneous Savings was passed at Rs. 3,000.

(*The estimate for the current year is Rs.* 2,000.)

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* Rent of Dhobiwada and Shops	Rs.	17,000
„ Chawls	„	15,000
„ Milch Cattle Stables	„	16,263
„ Lands, Tanks, &c.	„	30,000
„ Police and Fire Brigade quarters	„	19,492
Sundry Receipts	„	27,245
	Rs.	1,25,000

† *Health Department Fees based on past three years' actuals.*

Removing and skinning dead animals	Rs.	15,000
Grave digging	„	3,500
Sundry Fees	„	500
	Rs.	19,000

Engineer's Department.

Building Fees (galleries, rewas, scaffolding and weather frames)	Rs.	17,100	
Opening roads and footpaths for cleaning drains and laying water pipes	„	4,000	
Occupying public roads	„	3,000	
Sundry Fees	„	200	
			24,300

Assessment and Collection Department.

Notice, Warrant, Battakie, and Sundry Fees	Rs.	6,700
	Rs.	50,000

The estimate of income for the year 1894-95 from contributions from Municipal servants towards Pension, &c., Fund was passed at Rs. 15,800.

(*The estimate for the current year is Rs.* 15,300.

The estimate of income for the year 1894-95 from interest and profit on investments of Surplus Loan and other balances was passed at Rs. 1,50,000.

(*The estimate for the current year is Rs.* 2,00,000.)

The estimate of income for the year 1894-95 from interest on Sinking and Insurance, &c., Funds Investments was passed at Rs. 54,600.*

(*The estimate for the current year is Rs.* 29,800.)

The estimate of income from Opening Cash Balance was passed at Rs. 19,50,000.

(*The estimate for the current year is Rs.* 16,00,000.)

The total estimate of income for the year 1894-95 from current revenue was passed at Rs. 60,74,500, and including the opening balance of Rs. 19,50,000, at Rs. 80,24,500.

(*The estimate for the current year is Rs.* 77,45,820.)

BOMBAY, 15*th November* 1893.

AT the meeting of the Standing Committee held this day, there were present:

COWASJEE HORMUSJEE, Esq., G.C.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; the CHIEF ACCOUNTANT; and the SECRETARY.

The minutes of the meeting held on the 10th instant were signed.

No. 7857. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 16442, dated 13th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of Owner.	Where.
Mr. Adamji Bhaijibhoy	...Building at Dongri Street."

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* Sinking Fund ... ... Rs. 43,800
Insurance ... ... „ 790
Worn-out mains renewal fund... ... ... „ 10,010

Rs. 54,600

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 16674, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 7858.

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 16511, dated 14th instant, and under the Pension Regulations, sanction be given to the payment of a monthly pension of Rs. 6-8-8 to Sayad Husan bin Sayad Vali, late Havildar, Executive Engineer's office, from 1st August 1893."

No. 7859.

Considered letter No. 16490, dated 13th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to state that as Messrs. Rustomji Pestonji Master & Co., whose tender for the supply of castings during the current financial year was accepted by the Standing Committee in their Resolution No. 10497, dated 11th January last, failed in business and closed their works, fresh tenders were invited for two different periods, *viz.*, from 15th November 1893 to 28th February 1895 and from 15th November 1893 to 29th February 1896, with the view of ascertaining whether the rates for the longer term would be lower or more favourable than those for the shorter period. In response to the advertisement, quotations from four different firms have been received, but as the rates for the shorter and longer periods are the same, and as the acceptance of the lowest tender for the longer term will require the sanction of the Corporation under section 67 (*b*) of the Municipal Act, I request the sanction of the Standing Committee to my accepting the lowest tender of Messrs. Sorabji Shapurji & Co. for the supply of castings from 15th instant to 28th February 1894, and to the contract for the ensuing year 1894-95 being given to them in continuation of the contract now proposed to be let to them, without inviting fresh tenders, for which I shall ask for further sanction in February next. The rates of Messrs. Sorabji Shapurji & Co., and those of Messrs. Rustomji Pestonji Master & Co., are shown in the accompanying statement. The sum of Rs. 2,000, deposited by Messrs. Rustomji Pestonji Master & Co., is absolutely forfeited to the Municipality under the terms of the contract as liquidated damages for the contractors' failure.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner, in his letter No. 16490, dated 13th instant, sanction be given to the acceptance by him of the tender of Messrs. Sorabji Shapurji & Co. for the supply of castings from 15th idem to 28th February 1894 at schedule rates.

No. 7860.

"That on the application of the Commissioner the Committee will be prepared to consider the question of sanctioning a contract for the year 1894-95 for castings being given to Messrs. Sorabji Shapurji & Co. in continuation of their present contract, and without fresh tenders being called for."

No. 7861. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 16231, dated 10th instant, the Corporation be recommended to sanction the following expenditure being met out of savings in the road repairs and maintenance grant, *viz.*, (1) 6-ton steam roller, Rs. 6,000.; (2) 1,000 solid steel pickaxes, Rs. 2,000 ; (3) 11 hand road rollers at Rs. 75 each, Rs. 825 ; (4) 2 scraping machines at Rs. 400 each, Rs. 800; (5) 5 brushing machines at Rs. 1,050 each, Rs. 5,250 : total Rs. 14,875."

No. 7862. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 16229, dated 10th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. William Grossman for the recovery of Rs. 84-8-0, being the amount of wheel-tax bills due by him."

Read letter No. 16230, dated 10th instant, from the Commissioner to the Secretary, as under :—

SIR,—In 1883 the Corporation purchased from Mr. Ahmedbhai Habibbhai the whole of the village of Tulsi for Rs. 94,500 and according to the terms of the deed of conveyance, dated 19th January 1883, the land was conveyed to the Corporation "free "from incumbrances save and except the annual payments or rent "charges reserved in respect of the same hereditaments by the "said indenture of the 25th January 1819 and other the Govern- "ment taxes, local fund, or other rates, taxes and assessments, "whether local or Government, which now are or may hereafter "become payable in respect of the said land and hereditaments."

With a view to get the land transferred to the name of the Corporation, Mr. Ahmedbhai was requested to send the necessary documents to the Collector of Thana to enable him to register the name of the Corporation in his books as the owner of the land. He has not yet sent the necessary documents to the Collector, but contends that the Municipality is liable not only for the payment of the local fund cess of Rs. 17-8-8 but also for the payment of quit rent. This question was referred to Government and they decided that the Municipality was liable to

pay in addition to the local-fund cess Government charges on account of Tulsi, amounting to Rs. 72-11-11. This decision was communicated to Mr. Ahmedbhai, but he is dissatisfied with it and still refuses to arrange for its transfer to the name of the Corporation in the Collector's records. The Collector was therefore requested to suggest the course which the Corporation should adopt with a view to get the land transferred to their name, and he now informs me that it is not necessary that Government should move any further until the Corporation and Mr. Ahmedbhai come to some settlement and execute a regular *rajinama* and *kabulayat*, or until either of them produces a Civil Court's decree establishing its claim. The correspondence between the Collector, Mr. Ahmedbhai and this office extends over 9 years, and there is no likelihood of Mr. Ahmedbhai coming to terms. His difference lies with the Collector of Thana as to the apportionment of the annual assessment payable on account of Tulsi, but there is no reason why he should refuse to sign the *rajinama* to enable the Collector to transfer the village to the name of the Corporation, for which he was paid full compensation so far back as 1883. Under the circumstances I have the honor to request the approval of the Standing Committee under section 517 *(j)* of the Municipal Act to instruct the Municipal Solicitors to file a suit as suggested by the Collector to establish the claim of the Corporation and to get the land transferred to their name.

The Land Revenue Code does not make the transfer compulsory or impose a fine if the transfer is not made, but it provides that until the transfer is registered, the registered occupant is liable for the land revenue, and the Collector is not bound to recognize any interest of any one else. For this reason alone Mr. Ahmedbhai should be compelled to carry out the transfer, because in the event of any question arising with Government, the Corporation would have no *locus standi* whatever as they are not the registered occupants. Another difficulty that might arise is that, if Government thought fit, in the event of Mr. Ahmedbhai failing to pay the rent, to levy a distress on Tulsi village, which they might do at any time instead of on his malad or other property, the land might be sold without any notice whatever to the Corporation, or to prevent a sale they might have to pay the whole sum due on all Mr. Ahmedbhai's other villages instead of the amount due for Tulsi only. Owing to this difficulty the Municipal Solicitors, whom I consulted, advise that the Corporation have no alternative but to file a suit to compel Mr. Ahmedbhai to complete the sale of the Tulsi estate by signing the *rajinama*, authorizing the transfer in the Collector's records. A notice was given to Mr. Ahmedbhai on 23rd ultimo, requiring him to return the *rajinama* duly signed within a fortnight from the date of the notice which was received by him on the same day, and he was further informed that, if he did not comply with this requisition, proceedings would be taken against him, and he would be responsible for the cost thereof. The

rajinama has not yet been returned by him, and there is no alternative but to adopt the course suggested by the Collector of Thana. To avoid any difficulty in the future, it is very desirable that the sale should be completed and the name of the Corporation registered in the Collector's books.—I have, &c., H. A. ACWORTH, Commissioner.

No. 7863. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 16230, dated 10th instant, sanction be given, under section 517 *(j)* of the Municipal Act, to a suit being filed against Mr. Ahmedbhai Habibbhai, to secure to the Corporation the transfer in the Government records of Tulsi village purchased from him for the construction of Tulsi water works."

No. 7864. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 16208, dated 10th instant, the Corporation be recommended to sanction the amount of security to be furnished by the Muster Clerk employed under the Chief Inspector of Drains being fixed at Rs. 500."

Considered the following :—

No. 2846 OF 1893-94.

BOMBAY, 10*th November* 1893.

TO THE COMMISSIONER.

SIR,—With reference to para. 4 of this office No. 2410, dated the 10th ultimo, I have the honor to forward the accompanying statement shewing details of the unappropriated balance, aggregating Rs. 1,16,419-5-3, of the premia received on the different loans, and to state that the resolution which may be adopted by the Corporation with reference to the recommendation made by the Standing Committee as per their resolution No. 7333, dated the 1st instant, in regard to the disposal of the net premia received on the recent 42 lakhs 4 per cent. loan, will govern the present case and all other future cases of the kind.—I have, &c.,

SORABJI NAVAROJI COOPER,
Chief Accountant.

No. 16364 *of* 11*th November* 1893.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

Statement shewing the Unappropriated Balance of the Premia received on different Loans.

		Amount of net Premia received.	Unappropriated Balance.
		Rs. a. p.	Rs. a. p.
1	12 Lakhs Drainage and Water Works Loan ...	26,887 8 0	26,887 8 0
2	Miscellaneous Works Loan of Rs. 10,08,500 ...	53,849 2 6	
	Less—Amount appropriated as per Corporation's Resolution No. 2758, dated 11th June 1891, to meet excess on the Erskine Road Market Extension ... ...Rs. 31,908 11 11		
	Amount appropriated as per Corporation's Resolution No. 1200, dated 9th May 1892, to meet excess on the cost of land acquired for the Colaba Market Rs. 21,940 0 0		
		53,848 11 11	
			0 6 7
3	Agripada House Sullage Water Connections Loan of Rs. 2,48,000	4,722 8 0	4,722 8 0
4	35 Lakhs Various Sanitary Works Loan ...	80,969 4 2	80,969 4 2
5	Tansa Loan of 147 lakhs	2,43,839 10 6	
	Less—Amount appropriated to meet excess on the Tansa Water Works as per Corporation's Resolution Nos. 8893 and 12693, dated 12th November 1891 and 23rd February 1893	2,40,000 0 0	
			3,839 10 6
	Total Unappropriated Balance ...		1,16,419 5 3

Resolved: "That memorandum No. 16364, dated 11th instant, from the Commissioner be forwarded to the Corporation in continuation of the Committee's Resolution No. 7333, dated 1st November 1893." No. 7865.

Resolved: "That, as applied for by the Commissioner, in his letter No. 16404, dated 11th instant, the Standing Committee hereby approve, under the terms of section 185 of the Municipal Act, of his compounding with the owners of licensed public conveyances for the payment of wheel-tax for the calendar year 1894 on the following terms:— No. 7866.

"For each labour cart with 1 pair of bullocks, Rs. 20 per annum; the monsoon quarter (July, August and September) not being charged for.

"For each victoria and two horses, Rs. 63 for the whole year; no deduction to be allowed for the monsoon months.

"For each reckla with one pair of bullocks, Rs. 20 for the whole year ; no deduction to be allowed for the monsoon months."

It was agreed that the consideration of the following be postponed till next week :—Memorandum No. 16390, dated 11th instant, from the Commissioner, forwarding letter from the Chief Accountant reporting, with reference to the resolution of the Committee, No. 4646, dated 16th August 1893, regarding the keeping of stores accounts.

Read letter No. 16227, dated 10th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to Standing Committee's Resolution No. 6057 of 27th September last, I have the honour to forward reports from the Executive Engineer and Health Officer. This contractor has given endless trouble and has carried out his contract so far in a most unsatisfactory manner. I have no doubt he tendered at rates which could not pay him, but that was his risk, and he has no claim whatever on the Corporation. The present method of contracting for haulage is undoubtedly unsatisfactory. The system is pecuniarily a cheap one, but efficiency is risked or sacrificed, and we incur the odium of employing the employers of weak cattle. I hope, in process of time, watering by cart may altogether be superseded, but haulage will still be required for road-metal, sand-stone, contents of drains, &c. The question is one well deserving of attention and constructive criticism would be welcome.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 16227, dated 10th instant, from the Commissioner, and the accompaniments thereto, be forwarded to the Corporation with reference to petition from Mr. Ramjanbhai Babunbhai, together with the expression of the Standing Committee's opinion that the petitioner has no claim for compensation in connection with his contract for the supply of bullocks and drivers."

No. 7867.

Resolved : "That, with reference to their resolution No. 7601, dated 6th instant, the Corporation be recommended to sanction the grant of Rs. 2,394 for the cost of fitting up the retiring room and library for Councillors and of providing accommodation for the clerks who will be displaced by the arrangement.

No. 7868.

"That of this amount Rs. 845 for furnishing and fitting the room be debited to savings on the grant for furnishing the new offices, and Rs. 1,549 for the cost of providing accommodation for clerks to savings in the grant for contingencies, Building Loan.

"The Standing Committee also beg to recommend that sanction be given to a grant of Rs. 750 for cost of providing a new table* for the Council Hall as per sketch forwarded herewith, to the debit of savings in the grant for furniture as above."

No. 7869. *Resolved*: "That the following, together with précis of the same, be circulated and brought on for consideration at a future meeting:—Memorandum No. 16270, dated 10th instant, from the Commissioner, reporting on petition addressed to the Corporation, dated 8th September 1893, from the Chairman and Agents, Piru Mahomed Mill, on the subject of the cost of constructing the Tulsi pipe road from Haines Road to the mill premises."

No. 7870. The following return was read and *recorded*:—
Return of fires at No. 30 Kamathipura 8th Lane, DeLisle Road, Walpakady Road (Mazagon), 677 Girgaum Road, Dadar Road, 181 Ripon Road (Madanpura), Abdul Rahman Street, and Bazaar Road (Kamathipura), forwarded with the Commissioner's memorandum No. 16343, dated 10th November 1893.†

No. 7871. The following statement‡ was laid on the table:—
Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 12th November 1893.

No. 7872. It was agreed that the Committee's resolution No. 6309, dated 4th October 1893, be amended by the addition of the words "and Tansa" after the word "Salsette."

No. 7873. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 16575, dated 14th instant, sanction be given to the acceptance by him of the tender of Messrs. Cursetjee Jamsetjee Dadachanjee & Co. for constructing Souter Road, and a storm-water drain along it, at schedule rates, aggregating Rs. 46,822-0-2 *plus* Rs. 6,070-6-5, being the amount of 10 per cent. contingencies on the estimate; total, Rs. 52,892-6-7."

Sanction was given to the issue of two lakhs of debentures, being the unissued balance of the four and a half lakhs loan for Fire Brigade stations and quarters. (*See* file of confidential papers marked No. 280 kept by the Secretary.)

* It is probable that the net cost of the table will not exceed about Rs. 650, as an offer of Rs. 75 has already been made for the old table.

† *See* Appendix C. ‡ *See* Appendix B.

The consideration of the Budget Estimates for 1894-95 was resumed.

The Commissioner, in his "Introduction," writes :—

"EXPENDITURE.

"The increases in establishments have been explained in the Schedule Statements printed before each detailed Budget Statement. The increases and decreases in other items have also been fully explained in the marginal notes opposite the respective items entered in the Detailed Statements.

"The strength of the Inspectorial Staff of the Licensing Department has been doubled, an increase required to maintain efficiency, and which the augmenting returns of that department fully justify. But for the abolition and reduction of certain license fees during the current year, the income would have shown a material increase. In four cases an increase has been proposed in the pay of superior officers, *viz.*, the Executive Engineer, the Water Engineer, the Chief of the Fire Brigade, and the Superintendent of Gardens. The last has been allowed an increment of Rs. 50, but his salary is still Rs. 150 below the scheduled amount. A maximum salary of Rs. 800 is proposed to be scheduled for the Chief of the Fire Brigade, the actual salary to be drawn by the incumbent during the year being fixed at Rs. 650, or Rs. 50 in excess of present salary. It is proposed to make the commencing salary of the Chief Officer, Rs. 500, rising by annual increments of Rs. 50 to Rs. 800. The full statutory salary of Rs. 1,500 is proposed for the Executive Engineer, the Commissioner being strongly of opinion that the appointment, which would be with more propriety denominated Chief Engineer, is underpaid at a less figure. Last year's proposal to raise the salary of the Water Engineer to Rs. 1,200 is renewed, the Commissioner regarding this as no more than a fair compensation for the very heavy access of labor and responsibility entailed by the Tansa Works. It may here be added that a travelling allowance of Rs. 90 per mensem is proposed for the Special Drainage Engineer, in accordance with the intentions of the Corporation when that appointment was first made.

"The net increase in the total expenditure amounts to Rs. 1,63,399 ; of this increase Rs. 1,16,095 are due to provision having been made under the ordinary heads of

service, principally General Office, Assessment and Collection, Licensing Establishment, Fire Brigade, Drainage, Water Works, and Conservancy, as shown in detail in the body of the Budget. The other principal items of increase are (1) Pensions, Gratuities and Compassionate Allowances, Rs. 11,000; (2) Police Charges, Rs. 36,655; (3) Education, Rs. 9,403 (Rs. 603 in addition to Rs. 58,532 sanctioned for Primary Education for the current year *plus* Rs. 10,000 for Technical Institute = Rs. 10,603—Rs. 1,200, rent charges for School Committee's office not being required); (4) Election Expenses, Rs. 9,500; and (5) Special Extraordinary Works and investment of interest realized on Sinking, &c., Funds Investments, Rs. 1,41,785. It may be pointed out that there are decreases of (1) Rs. 21,553 under Gardens, almost entirely on account of the revised rate for water-supply; (2) Rs. 51,269 under Streets and Buildings, owing to the Executive Engineer having submitted carefully prepared road repairs estimates for the area to be repaired at so much per square yard instead of in the details hitherto shown in the Schedule and Detailed Budget Statements (an arrangement which will materially facilitate work); (3) Rs. 14,126 under Markets and Slaughter-houses, principally on account of the provision made in the current year for the renewal of meat-vans not being necessary for the ensuing year; and (4) Rs. 72,211 under Debt notwithstanding the enhanced provision of Rs. 40,000 on account of the 25¼ lakhs loan. This decrease is due to the saving of Rs. 1,13,000 effected by the repayment on 1st July 1893 of the Government 4½ per cent. consolidated loan out of the funds raised from the public at four per cent."

"CLOSING BALANCE.

"The estimated closing balance is Rs. 15,56,613,* or over 14½ lakhs above the minimum required by law, as detailed below:—Opening Balance, Rs. 19,50,000; Income, Rs. 62,00,500: total Rs. 81,50,500 *less* Expenditure, Rs. 65,93,887=Closing Balance, Rs. 15,56,613."

Corporation and Standing Committee Establishment—Detailed Statement No. 1.

The application made by the Head Clerk, that his personal allowance might be consolidated with his salary, was refused.

* The whole of this surplus balance is proposed to be kept invested.

The estimate of expenditure for the year 1894-95 was passed at Rs. 56,848.

The increases are as under :—

Publishing weekly accounts, printing minutes, agenda papers, budget, &c., &c.	Rs.	1,200
Contingencies	,,	300
Clothing of Peons	,,	208
	Rs.	1,708

(*The grant for the current year is Rs.* 55,140.)

Municipal Commissioner's Personal Office Establishment—Detailed Statement No. 2.

Proposed by A. G. Viegas, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

" That the salary of the Head Clerk be retained at Rs. 200 per mensem, *plus* the personal allowance of Rs. 100 per mensem."

Carried.

It was agreed that the maximum personal allowance be paid to the Head Clerk from the commencement of the next financial year, and the estimate of expenditure for the year 1894-95 be passed at Rs. 60,780, as per detailed statement No. 2 and schedule attached thereto.

The increases are as under :—

Sanctioned increase in the Commissioner's salary ...	Rs.	1,000
Increment of personal allowance to Head Clerk ...	,,	480
Stationery	,,	120
Peons' clothing	,,	352
	Rs.	1,952

(*The grant for the current year is Rs.* 58,828.)

General Office Establishment—Detailed Statement No. 3.

Proposed by A. G. Viegas, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

" That the item of three janitors for day-duty at Rs. 12 each per mensem be omitted."

Carried by the casting vote of the Chairman.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

" That the grant for law charges be entered at Rs. 18,000 instead of Rs. 25,000."

Carried by 6 votes *against* 2.

Resolved : "That the item of Rs. 3,500 for repairs to water, drainage, electric light, &c., fittings at the new Municipal Office building, be struck out."

It was agreed that the schedule of appointments framed under section 79 of the Municipal Act, already sanctioned by the Standing Committee, be modified under section 79 (2) to allow of the following alterations therein :—

Increase in pay of attendant for supplying water to Parsis	Rs.	3	per mensem.
Pay of Mali	„	12	„
* 2 Naiks (night-duty), Rs. 11 each	„	22	„
* 4 Watchmen (night-duty), Rs. 9 each	„	36	„
	Rs.	73	per mensem,
	or Rs.	876	per annum.

The estimate of expenditure, as thus amended, was passed at Rs. 29,116.

The increases are as under :—

Establishment as above	Rs.	876
Printing Voters' List	„	500
Contingencies, including coal, oil, cotton waste, &c., for hydraulic lift, boiler inspection fees, &c.	„	265
Ground rent	„	418
Stores and implements for Garden	„	50
Sand, earth, manure, turf, &c., for Garden	„	100
Clothing for Muccadum, Naiks, &c.	„	115
	Rs.	2,324

(*The grant for the current year is Rs.* 26,792.)

Accounts and Expenditure, Audit Establishment—Detailed Statement No. 4.

The estimate of expenditure in respect of this department for the year 1894-95, as per detailed statement No. 4 and schedule attached thereto, was passed at Rs. 57,448.

The increase is in clothing for Peons	Rs.	352
Less Decrease—		
Personal allowance to the late Head Audit Clerk ...	„	300
Net increase...	Rs.	52

(*The grant for the current year is Rs.* 57,396.)

* Sanctioned as per Corporation's Resolution No. 2156, dated 5th June 1893.

Assessment and Collection Department—Detailed Statement No. 5.

PROPERTY AND WHEEL-TAX ESTABLISHMENT.

On the motion of Bhalchandra K. Bhatawadekar, Esq., it was *resolved*, by 7 votes *against* 4 votes—

"That the following proposed increases in the schedule be struck out :—

1	Registration Clerk on	Rs.	50	per mensem...	Rs. 600	per annum.
2	Do. on Rs.30 each	„	60	do.	„ 720	do.
1	Registration Clerk on	Rs.	20	do.	„ 240	do.
1	Correspondence Clerk	do.	50	do.	„ 600	do.
1	Do.	do.	20	do.	„ 240	do.

Rs. 200 per mensem or Rs. 2,400 per annum.

Ward Inspection Office—

2	Ward Clerks on	Rs.	35	each Rs. 70	per mensem...	Rs. 840	per annum
4	Peons on	„	10	„ „ 40	„ ...	„ 480	do.

Rs. 110 per mensem or Rs. 1,320 per annum.

Total Rs. 3,720 per annum."

Resolved : "That the schedule appointments framed under section 79 of the Municipal Act, already sanctioned by the Standing Committee, be modified under section 79 (2) to allow of the addition thereto of one Deputy Superintendent for A ward on Rs. 100 per mensem."

Resolved : "That the grant for Property and Wheel Tax Establishment be passed at Rs. 1,44,498."

The increases are as under :—

	Rs.
Establishment as above	1,200
Contingencies	400
Peons' clothing	1,144
Rs..	2,744

(*The grant for the current year is Rs.* 1,41,754.)

Resolved : "That the grant for Town Duty collection be passed at Rs. 57,720."

The increases are as under :—

	Rs.	Rs.
Commission to Port Trust...	600	
Do. to B.B. & C. I. Railway Company ...	320	
		920
Less—Decrease in Commission to G. I. P. Railway Coy.		200
Net increase...	Rs.	720

(*The grant for the current year is Rs.* 57,000.)

Resolved: "That the grant for Tolls collection be passed at Rs. 1,680."

(*The grant for the current year is the same.*)

LICENSING ESTABLISHMENT.

On the motion of A. G. Viegas, Esq., it was *resolved* by 7 votes *against* 3 votes—

"That the schedule of appointments in respect of this department be retained as entered in the budget for the current year; that all the proposed increases, &c., in the staff be struck out, and that the grant be passed at Rs. 27,256."

The increases are as under :—

Contingencies, Stationery and Printing	Rs. 150
Clothing for Peons	„ 168
Land Conveyance License Establishment, and Contingencies	„ 360
	Rs. 678

(*The grant for the current year is* Rs. 26,578.)

REVENUE AND REFUND AUDIT ESTABLISHMENT.

The grant for this department was passed at Rs. 24,168. The increase is—

Peons' clothing	Rs. 120

(*The grant for the current year is Rs.* 24,048.)

The grand total for Assessment and Collection Department was passed at Rs. 2,55,322.

(*The grant for the current year is Rs.* 2,51,060.)

BOMBAY, 22*nd November* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; K. M. SHROFF, Esq.; KAIKHOSRO N. KABRAJI, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; the CHIEF ACCOUNTANT; and the SECRETARY.

The minutes of the meeting held on the 15th instant, were signed.

The affixing of the seal of the Corporation to deed of agreement between Mr. Dadabhai Kavasji Motisha and the Corporation, regarding the acquisition of the set-back

of property situated at Nos. 25-27, Bora Musjid Lane, Fort, was postponed in order to enable the Commissioner to inquire into the price paid for ground in that neighbourhood.

The seal was affixed to deeds of contract (1) with Messrs. Hormasji Jehangirji & Co. for the construction of Gilder Street, Agripada, and a storm-water drain along such street; and (2) to ditto with Messrs. Mistri, Bhedwar, Vachaghandy & Co., for the construction of Club Road, Agripada, and a storm-water drain thereat.

No. 8146. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 17219, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 8147. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 16668, dated 15th instant, sanction be given to the transfer of Rs. 500 from savings in the Executive Engineer's Department, salary of the Executive Engineer, to D, road repairs and maintenance, purchase of a new stone-breaking machine, to meet excess consequent on the fall in exchange on England."

Read letter No. 16497, dated 13th instant, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to report that great difficulties have been experienced by the Assessment Department in collecting the water tax on Government bungalows occupied by Government officers in their official capacity on account of the rapid and constant changes of tenancy, tenants remaining in occupation often for only a month or two and then proceeding to England or elsewhere where they are practically not accessible. The tax levied or attempted to be levied has been according to the Government meter rate. Government have from time to time been pressed to undertake the collection of the tax themselves, but there are difficulties in the way of doing this so long as it is levied by measurement, as in that case it cannot, under Government rules, be added to rent and recovered through the Secretary of State from an officer at home. Government have now, at my instance, consented to collect the tax under an arrangement, under which it will be charged at a compounded sum equal to the tax on value. They decline, however, to be responsible for arrears which must be dealt with by the Assessor and Collector in the best way he can. The tax on value is, we find, at most, equal to the tax levied according to meter rates, and the slight deficiency (about ·8) will be more than compensated for by the removal of present friction and further accumulation of arrears,

much of which could be irrecoverable. I have therefore the honor to request sanction to this arrangement which serves the interests of both parties, *viz.*, the recovery in the case of Government bungalows occupied by officers in their official capacity, of a compounded water rate equal to the tax on value on Mr. Stevens's valuation. The Advocate General has advised that the imposition would be legal.—I have, &c., H. A. ACWORTH, Commissioner.

No. 8148. *Resolved* : "That, as applied for by the Commissioner in his letter No. 16497, dated 13th instant, sanction be given to the recovery of compounded water rate in the case of Government bungalows occupied by officers in their official capacity, equal to the tax on value on Mr. Stevens's valuation."

Read letter No. 16680, dated 15th instant, from the Commissioner, to the Secretary, as under:—

SIR,—I have the honour to state that, as one Hari Dwarkaji constructed a rewas on the first storey of his house in the village of Bhoiwada, which projected over the passage in front of his house (this passage being considered a street within the meaning of section 3 (*w*) of the Municipal Act), a notice, under section 308 of the said Act, was served upon him, requiring him to remove this over-hanging rewas. But as he did not comply with the terms of the notice, the Engineer's Department proceeded to pull it down. In the course of this operation the remaining portions of the walls of the room, of which the rewas formed the front, became unsafe and were also pulled down. Mr. Hari thereupon filed a suit in the High Court and claimed Rs. 3,000 as damages for such removal. The case came on for hearing before the Hon'ble Mr. Justice Farran, who held that the passage in question is a "street" within the meaning of the Municipal Act, but that the right of the public over this street is limited by their actual user of it, and that as the plaintiff exercised acts of ownership from time to time which temporarily interfered with the access of the public to the particular portion of the open space over which he extended the rewas, that portion cannot be regarded as a portion of the "street" over which the public "have a right of passage or access or have passed and had access uninterruptedly for a period of 20 years." Such being the case, his Lordship further held that the plaintiff was entitled to project the rewas in the manner he did, and that the Municipality should restore the rewas and the room as they stood before the demolition. The estimated cost of this work, as arranged between the Executive Engineer and the plaintiff's architect, is Rs. 600, which I propose to pay to him in full satisfaction of all claims in respect of the restoration of the building and to allow him to reconstruct the rewas. The Solicitors advise that it is very desirable that the matter should be settled in this way rather than that the Municipality should undertake the restoration of the

building—a course which would inevitably lead to considerable difference of opinion, dispute and trouble. Under these circumstances, I request authority to pay this sum under section 118 (*f*) (*ii*) of the Municipal Act, and request the Standing Committee to recommend the Corporation to sanction an additional grant of Rs. 600 from Surplus Cash Balance for the purpose.

	Rs.	Rs.
Amount reserved in the Budget estimates for the year 1894-95 for probable extra grants up to the end of the current financial year		1,35,079
Deduct—Amount of grants sanctioned (excluding temporary advances to be adjusted hereafter)	20,556	
Amount recommended for sanction ...	30,600	
		51,156
Balance available		...Rs. 83,923

—I have., &c.. H. A. ACWORTH, Commissioner.

No. 8149. *Resolved* : " That letter No. 16680, dated 15th instant, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to the grant of Rs. 600 from surplus cash balance, for payment, under the terms of section 118 (*f*) (*ii*) of the Municipal Act, to Mr. Hari Dwarkaji in full satisfaction of all his claims against the Municipality in connection with the demolition of his property situate in Bhoiwada, Parel ; that the Commissioner be asked to place before the Committee a statement of the law charges which have been incurred by the Corporation in this case, and to state, also, who the officer is who was responsible for the demolition."

No. 8150. *Resolved* : " That, as applied for by the Commissioner in his letter No. 16141, dated 6th instant, the Corporation be recommended to sanction the budgetted number of lamps being increased from 3,567 to 3,575, to provide for the improved lighting of the Port Trust dock wharves for the better prevention of accidents from people falling into the water. The cost of the lamps, Rs. 1,476, to be debited to the grant for gas lighting, E, contingencies, and the monthly charge, Rs. 232-12-6, to the grant for gas lighting, A, Streets and Buildings, current year's budget."

No. 8151. *Resolved* : " That, as applied for by the Commissioner in his letter No. 16548, dated 14th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Lieut. H. C. F. Scott for the recovery of Rs. 18, being the amount of wheel-tax bills due by him."

No. 8152. *Resolved* : " That the Commissioner be asked to obtain a report from the Executive Engineer as to whether he has checked the rates asked by Messrs. Venkoo Balloo, for the glazed coping tiles and quarry glass which they wish to sell to the Corporation."

No. 8153. *Resolved* : " That the following be *recorded*:—Letter No. 17078, dated 21st instant, from the Commissioner reporting, as required by section 69 (*d*) of the Municipal Act, that he has accepted the tender of Messrs. Ratanji Bejanji & Co., the lower of the two tenders received, for the work of constructing compound wall and pavement in front and rear of the Municipal Offices at a cost of Rs. 3,192-12-0 ; stating that in the tender, the contractors have given the rate for blue stone slabs at annas 8 and pies 6 per 100, but as this was an obviously clerical error, the rate being evidently for each slab, it has been corrected and Rs. 35-1-0 included in the amount of the tender.

No. 8154. It was agreed that the following be circulated and brought on for consideration at a future meeting :—Memorandum No. 16984, dated 18th instant, from the Commissioner, forwarding, with reference to the Committee's resolution No. 3041, dated 28th June last, report and estimates from the Executive Engineer on the subject of the re-erection of the gates of the Elphinstone Circle Gardens.

The consideration of the following was postponed for a fortnight :—Memorandum No. 16390, dated 11th instant, from the Commissioner, forwarding letter from the Chief Accountant reporting, with reference to the resolution of the Committee, No. 4646, dated 16th August 1893, regarding the keeping of stores account.

No. 8155. *Resolved* : " That the following be forwarded to the Commissioner for disposal and that the applicants be informed that if they wish to appeal

against the assessment of their sheds they can apply to the Court of Small Causes :—Letter, dated 15th instant, from Hadji Ebrahim Habib and others complaining that Water and Halalkhor taxes are charged in respect of their premises in Bhusawal Street."

It was agreed that item No. 13 on the agenda paper be *struck out*, as the letter is addressed to the Corporation.

No. 8157. *Resolved* : "That the following be *recorded* :—Memorandum No. 16604, dated 15th instant, from the Commissioner, reporting, with reference to the resolutions of the Committee No. 4484, dated 3rd October 1888, and No. 5620, dated 9th January 1889, the following transfers, *viz.*, (*a*) from the 12 Lakhs Drainage and Water Works Loan deposit account, Rs. 4,694-2-0 to the Municipal General Fund Pass Book on 10th instant ; (*b*) from the 44 Lakhs Sanitary Works Loan deposit account, Rs. 6,969-4-0 to ditto on ditto ; (*c*) from the 7 Lakhs Sanitary Works Loan deposit account 5 per cent. Municipal Debentures for Rs. 15,000 to the Surplus Cash deposit account on ditto ; (*d*) from the Agripada House Sullage Connections Loan deposit account 5 per cent. Municipal Debentures for Rs. 44,000 to ditto on ditto ; (*e*) from the Municipal Building Fund deposit account 5 per cent. Municipal Debentures for Rs. 2,02,000 to ditto on ditto ; and (*f*) from the 4½ Lakhs Fire Brigade Quarters and Stations Loan deposit account 4 per cent. Municipal Debentures for Rs. 62,000 to ditto on ditto."*

The following return was read and *recorded* :—

No. 8158. Return of fire at Wari Bunder, Babula Tank Road and Hornby Road, forwarded with the Commissioner's memorandum No. 16977, dated 18th November 1893.†

The following statement ‡ was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 19th November 1893.

* The Chief Accountant reports to the Commissioner that the balances standing to the credit of the above accounts after effecting the transfers are as under :—

(*a*)	In 4 per cent. Government Paper for	Rs.	2,35,000 ...	Rs.	2,34,118	12	0
(*b*)	Do. do.	„	4,74,000 ...	„	4,63,914	14	5
(*c*)	In 5 per cent. Municipal Debentures	„	1,05,000 ...	„	1,05,000	0	0
(*d*)	Do. do.	„	26,000 ...	„	26,000	0	0
(*e*)	Do. do.	„	1,43,000 ...	„	1,43,000	0	0
(*f*)	In 4 per cent. do.	„	1,61,000 ...	„	1,61,000	0	0

† *See* Appendix C. ‡ *See* Appendix B.

Read letter No. 17180, dated this day, from the Commissioner, to the Secretary, as under :—

SIR,—I have the honor to state that, as Government informed me in December 1892, the passing of the short Act legalizing the payment of the reduced instalment of Rs. 9,500 per mensem on account of the Vehar Water Works Loan would not be unduly delayed, and as they decided to receive the reduced instalment from 1st January 1893, Rs. 1,14,000 were provided in the current year's budget for the purpose. But the amending Act was not passed before the commencement of the current financial year and Government required us to make payments at the full rate of Rs. 14,600 per month. We have thus paid Government Rs. 1,02,200 out of the provision of Rs. 1,14,000 up to October 1893, leaving Rs. 11,800 available.

The Act has not yet received the assent of H. E. the Viceroy, and Government therefore require us to continue the payment of the full monthly instalment of Rs. 14,600 until the Act is passed by H. E. the Viceroy. The payment of this full monthly instalment for the remaining 5 months of the year will cause an excess of Rs. 61,200 over the budget grant, which I request the Standing Committee to recommend the Corporation to sanction by an advance from available balances.

All the payments made in excess of the sum payable under the proposed amending Act will be recovered from Government as soon as the assent of His Excellency the Viceroy is received thereto.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That letter No. 17180, dated this day, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to the grant from surplus cash balance or loan fund balances of Rs. 61,200 to provide for the payment of the full monthly instalments of the Vehar debt, pending receipt of the Viceroy's sanction to a short Act being passed reducing the amount of the monthly instalments consequent on the extension of the period of repayment, such excess payments to be recovered when the amending Act has been passed."

No. 8159.

The consideration of the Budget Estimates for 1894-95 was proceeded with.

Fire Brigade—Detailed Statement No. 6.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

" That the pay of the Chief Officer be retained at Rs. 600 *plus* Rs. 50 as conveyance allowance."

Carried by 7 votes *against* 2.

Proposed by A. G. Viegas, Esq., seconded by Kaikhosru N. Kabraji, Esq.—

"That the Corporation be recommended to eliminate the appointment of Surgeon to the Fire Brigade and to amend the Pension Regulations accordingly."

Lost, the votes being 3 *for* and 5 *against*.

Resolved: "That the schedule of appointments framed under section 79 of the Municipal Act, already sanctioned, be modified under section 79 (2) to allow of the following alterations thereto :—

The insertion of—

1 Tindal on Rs. 35 a month, or	Rs.	420 a year.
1 Do. on Rs. 30 ,, ...	,,	360 ,,
4 Do. on Rs. 25 each, Rs. 100 a month or ...	,,	1,200 ,,
	Rs.	1,980 a year

and the striking out of the following appointments :—

2 Tindals on Rs. 40 each, Rs. 80 a month or ...	Rs.	960 a year.
2 Do. ,, 30 ,, ,, 60 ,, ...	,,	720 ,,
2 Do. ,, 20 ,, ,, 40 ,, ...	,,	480 ,,
	Rs.	2,160 a year."

The increases are as under :—

Establishment as above	Rs.	1,980
Increase allowed to a Foreman within sanctioned limit	,,	300
Purchase of 3,540 feet 2½" rubber-lined hose in 60 feet lengths	,,	6,000
		Rs. 8,280
Less—		
Establishment as above	Rs.	2,160
Rent of Fire Stations and Quarters	,,	1,200
Contigencies for extinguishing fires	,,	1,000
		Rs. 4,360
Net Increase ...		Rs. 3,920

The grant for the Brigade was passed at Rs. 1,15,435.
(*The grant for the current year is Rs.* 1,11,515.)

Maintenance of Public Gardens—Detailed Statement No. 7.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadeker, Esq.—

"That no increase be given to the Superintendent."

Carried.

The increases in the charges for these gardens are as under :—

Temporary labour	Rs.	500	
Purchase of bullocks	,,	150	
Construction and repair of drains ...	,,	500	
Repairs and alterations to cages ...	,,	500	
			Rs. 1,650
Less Decrease—			
Water supply			,, 16,129
Net Decrease ...			Rs. 14,479

The estimate of expenditure for Victoria Gardens was passed at Rs. 49,398 as per detailed statement No. 7 and schedule attached thereto.

Elphinstone Circle Garden.

Decreases—

Stores and petty charges	Rs.	90
Repairs and painting railings...	„	210
Sand, turf, &c.	„	200
Water supply	„	2,650
Decrease ...	Rs.	3,150

Falkland Road Gardens.

Increases—

Stores and petty charges...	Rs.	100	
Repairs	„	75	
			Rs. 175
Less Decrease—			
Water supply			„ 336
Net Decrease ...			Rs. 161

Northbrook Gardens.

Increase—

Stores and petty charges	Rs.	76
Less Decreases—		
Repairs to buildings, roads, &c.... ...	Rs.	275
Water supply	„	808
		„ 1,083
Net Decrease ...	Rs.	1,007

Sir Cowasji Jehangir Garden, Mahim.

Increase—

Stores and petty charges	Rs.	304
Less Decrease—		
Water supply	„	138
Net Increase ...	Rs.	166

Bazaar Gate Garden.

Decreases—

Stores and petty charges	Rs.	10
Sand, turf, &c.	„	50
Water supply	„	170
Decrease ...	Rs.	230

Garden on the Flats.

Increase—		
Stores and petty charges	Rs.	100
Less Decrease—		
Water-supply	„	706
Net Decrease ...	Rs.	606

Dicks' Tank Garden.

Increase—		
Stores and petty charges	Rs.	130
Less Decrease—		
Water-supply	„	136
Net Decrease ...	Rs.	6

Malabar Hill Garden.

Increase—		
Stores and petty charges	Rs.	50
Less Decrease—		
Water-supply	„	2,730
Net Decrease ...	„	2,680

Total net decrease in Gardens, Rs. 22,153.

The estimate for Gardens was passed at Rs. 57,994.

(*The grant for the current year is Rs.* 80,147.)

Public Works (Engineer's) Department.—Detailed Statement No. 8.

General Supervision and Miscellaneous Duties.—Proposed by A. G. Viegas, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the pay of the Executive Engineer be passed at the present figure, Rs. 1,250."

Carried.

Resolved : "That the schedule of appointments framed under section 79 of the Municipal Act, as already sanctioned, be modified under section 79 (2) to allow of the following modifications therein :—The insertion of the appointment of Architectural Surveyor, Rs. 250 per mensem or Rs. 3,000 per annum."*

* Sanctioned by the Corporation under their Resolution No. 13619 of 16th March 1898.

The increases are as under :—

Salary of Architectural Surveyor	Rs.	3,000
Peons' clothing	„	232
	Rs.	3,232

Less Decrease on—

Salary of Executive Engineer as entered in the Budget	Rs.	3,000
Present salary drawn by Architectural Surveyor below maximum	„	480
Printing	„	250
Contingencies	„	100
	„	3,830
Net Decrease ...	Rs.	598

The estimate for this branch was passed at Rs. 40,326.

(*The grant for the current year is Rs.* 40,924.)

Workshops.—Resolved : "That the schedule of the appointments framed under section 79 of the Municipal Act, as already sanctioned, be modified under section 79 (2) to allow of the following alterations therein:—Insertion of travelling allowance to the First Engineer and Superintendent, Love Grove Pumping Station, Rs. 50 per mensem or Rs. 600 per annum ; one workman and artizan at Re. 1 a day or Rs. 26 per mensem or Rs. 312 per annum ; one workman and artizan at As. 12 a day or Rs. 19-8 per mensem or Rs. 234 per annum ; two workmen and artizans at As. 8 a day or Rs. 26 per mensem or Rs. 312 per annum—

Total ... ... Rs. 1,458

"That the salary of Mukadum be reduced from Rs. 25 to Rs. 15 per mensem—

	Per annum.	
Decrease	Rs.	120

"That the following be struck out of the schedule :—

One Foreman Fitter on Rs. 75 per month or Rs. 900 a year.

One Shop Clerk on Rs. 15 per month or Rs. 180 „

Decrease ...	„	1,080
Total Decrease ...	„	1,200
Net Increase...	Rs.	258

The increases are—			
Establishment as above		Rs.	258
Less Decreases—			
Labour for extra work	Rs. 258		
Repairs to machines, &c.	„ 500		
		„	758
Net Decrease ...		Rs.	500

"That the workshops charges (as detailed at pages 31-33 of the Budget) be passed at Rs. 1,04,500, less recoveries of same, amount to be made from Municipal Departments and private persons for work to be executed in the shops.

(*The grant for the current year is Rs.* 1,05,000.)

Drainage.—Proposed by K. M. Shroff, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the estimate of Rs. 400 for purchase of a typewriter be omitted."

Carried.

Resolved : "That the schedule of appointments framed under section 79 of the Municipal Act, already sanctioned, be modified under section 79 (2) to allow of the following alterations thereto :—(1) The insertion of the following increases : increase in the salary of a Copying Clerk, Rs. 5 per mensem or Rs. 60 per annum, increase in the salary of a Tally Clerk, Rs. 5 per mensem or Rs. 60 per annum—total Rs. 120 per annum—12 Halalkhors' Sub-Mukadams on Rs. 13 each or Rs. 1,872 a year ; and (2) the striking out of the following entries : 12 labourers on Rs. 13 each or Rs. 1,872 a year."

Love Grove Pumping Station.—Resolved: "That the schedule of appointments framed under section 79 of the Municipal Act, as already sanctioned, be modified under section 79 (2) to allow of the following changes therein :—(1) The alteration of the designation of Superintending Engineer to that of First Engineer and Superintendent, and that the allowance to such officer of Rs. 50 per mensem be deleted from this schedule, as it has been provided for under *Workshops* charges; (2) the increase in the pay of Third Engineer from Rs. 85 to Rs. 100 a month or Rs. 180 a year ; (3) of the Fourth Engineer from Rs. 75 to Rs. 90 or Rs. 180 a year ; (4) the insertion of 6 Head Oilmen at Rs. 18 a month each or Rs. 1,296 a year, and 3 Oilmen at Rs. 15 or Rs. 540 a year ; (5) the reduction in salary of 2

Winch Drivers by Rs. 5 a month each or Rs. 120 a year; (6) the increase in the salary of 3 Oilmen by Rs. 3 a month each or Rs. 108 a year; (7) the insertion of the posts of 2 Assistant Winchmen on Rs. 12 each or Rs. 288 a year, and of one additional Coalman on Rs. 10 or Rs. 120 a year, also of one Clerk on Rs. 25 or Rs. 300 a year.

"That the words 'and care-taker' after the word 'mali' in this schedule be struck out.

"That the following appointments be struck out of the schedule :—

4 Engine Drivers at	Rs.	20 a month each or	Rs.	960	a year.
1 Assistant Packer on	„	20 a month or	„	240	„
1 Fireman on	„	18 „	„	216	„
1 Fitter on	„	30 „	„	360	„

The increases under Drainage are as under :—

Establishment as above (120+516)	Rs.	636	
Stores	„	540	
Cost of 6 sets of expanding plugs for applying water test to drains	„	255	
Cost of 4 smoke machines for testing ventilating shafts	„	235	
Cost of 2 drain-cleaning apparatus with extra fittings	„	330	
Clothing for Peons	„	184	
Water-supply to Inspector's chowkies, &c. ...	„	16	
Telephone connections and shifting of Love Grove Telephone	„	210	
Coal	„	6,750	
Repairs to Machinery	„	1,000	
Water-supply to Love Grove Station	„	430	
			Rs. 10,586

The decreases are as under :—

Repairs to roads opened for cleaning, &c., drains .	Rs.	400	
2 portable fans	„	550	
Contingencies and advertisements	„	100	
Printing	„	500	
Salaries drawn by the Love G. P. S. staff below maximum	„	1,380	
Contingencies and stores	„	1,500	
			Rs. 4,430
		Net Increase Rs.	6,156

The grant for this branch was passed at Rs. 2,03,147.

(*The grant for the current year is Rs.* 1,96,991.)

Water Works Department.—Proposed by A. G. Viegas Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

"That the pay of the Water Engineer be retained at Rs. 1,000 per mensem."

Amendment proposed by E. B. Carroll, Esq., seconded by the Hon'ble Mr. Fazulbhoy Visram—

"That the pay of the Water Engineer be fixed at Rs. 1,100 per mensem."

On a division, the amendment was *lost*, the votes being 4 *for* and 7 *against*.

The original motion was *carried*.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the appointment of a Shorthand Writer on Rs. 60 be omitted, and that a Copying Clerk on Rs. 30 be entered instead."

Carried.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the appointment of Assistant Superintendent of maintenance on Rs. 150 a month *plus* Rs. 60 a month as allowance be omitted from the schedule."

Carried.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the salary of the Chief Inspector, Inspection, Distribution and Waste Prevention, be entered at Rs. 200 rising to Rs. 300 a month, without house or other allowances, and that the schedule be amended accordingly."

Amendment proposed by K. M. Shroff, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

"That the appointment of the Chief Inspector be abolished."

On a division, the *amendment* was *lost*, the votes being 4 *for* and 5 *against*.

The original motion was *carried* by 7 votes *against* 3.

Resolved : "That the schedule of appointments framed under section 79 of the Municipal Act, as already sanctioned, be modified under section 79 (2) to allow of the following alterations therein :—

"'*Maintenance.*—Increase in conveyance allowance of Overseer, Rs. 10 a month or Rs. 120 a year ; increase in salary of 2 Clerks by Rs. 5 each a month or Rs. 120 a year. The insertion of 20 labourers on Rs. 12 per mensem

each instead of 40 on Rs. ditto ; of 120 ditto on Rs. 10 and of 128 on Rs. 9 each ; and the striking out of 100 on Rs. 12, 40 on Rs. 10, and 100 on Rs. 9 ; at an extra cost of Rs. 1,104 per annum.' "

Under this head it was agreed that the schedule be varied by the insertion of one Assistant Inspector for D Ward on Rs. 50 per mensem, and that a travelling allowance of Rs. 15 per mensem be granted to each of the two Sub-Inspectors employed in meter-reading, instead of to one only.

Lakes, Reservoirs and Filters.—It was agreed that the schedule be varied to allow of the salary of the Inspector, Vehar and Mandala divisions, being increased by Rs. 10 per mensem.

It was agreed that the schedule be varied by the striking out of the appointment of one Inspector, Malabar Hill Reservoir and Filters, on Rs. 80 a month or Rs. 960 a year.

Pawai Works.—It was agreed that the schedule be varied by striking out therefrom of the appointment of a Fireman on Rs. 20 a month or Rs. 240 a year.

It was agreed that the item of provision for overtime and temporary labour, Water Works, be reduced from Rs. 7,500 to Rs. 3,000.

Proposed by Kaikhosro N. Kabraji, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

" That the grant for materials and tools and plants be reduced from Rs. 45,000 to Rs. 35,000."

Amendment proposed by G. W. Roughton, Esq., seconded by Hurkisondas Nurrotumdas, Esq.—

" That the grant for materials and plant be fixed at Rs. 40,000."

On a division, the *amendment* was *carried* as a substantive motion.

On the motion of Bhalchandra K. Bhatawadekar, Esq., it was agreed—

" That the grant for contingencies be retained at the existing figures, and that the total be passed at Rs. 9,500, as at present, instead of at Rs. 11,200."

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That Rs. 25,000 only be granted for the renewal of existing mains worn out, instead of Rs. 1,00,000 as entered in the Budget."

Carried by 7 votes *against* 4.

The item of Rs. 4,000 on account of repointing division walls of filters at Malabar Hill Reservoir was struck out of this Budget for maintenance.

The increases are as under :—

Establishment as above	Rs.	564
Provision of employing a Fireman whenever required instead of employing one permanently	„	100
Materials, tools and plant	„	5,000
Peons' clothing	„	300
	Rs.	5,964

Less Decreases—

Salaries drawn below maximum ...	Rs. 1,920	
Renewal of water mains	„ 75,000	
	„	76,920
Net Decrease...	Rs.	70,956

The grant for Water Works was passed at Rs. 2,28,968.

(*The grant for the current year is Rs.* 2,99,924.)

It was agreed that the next meeting of the Committee be held at 2-30 P.M.

BOMBAY, 29*th November* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, ESQ., C.I.E., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. R. CARROLL, Esq., M.I.C.E. ; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJEE, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; the HEALTH OFFICER ; the ASSISTANT HEALTH OFFICER ; the CHIEF ACCOUNTANT ; and the SECRETARY.

The minutes of the meeting held on the 22nd instant, were signed.

The Commissioner having informed the Committee of the result of the tenders received by him for the taking up of the Rs. 2,00,000 of the 4½ lakhs 4 per cent. loan for Fire Brigade quarters, station, &c., it was—

Resolved : "That sanction be given to the acceptance by the Commissioner of tender received from brokers for the taking up of the Rs. 2,00,000

No. 8608.

of the 4½ lakhs 4 per cent. loan for Fire Brigade quarters and stations, at Rs. 102-2-0 per cent.; brokerage to be paid at ¼ per cent."

The seal of the Corporation was affixed to the following :—To deed of agreement between Mr. Maneckjee Ijiajee Balsara and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises No. 54, situate at 4, Marine Street, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 20 per square yard for any land shown on the plan, to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition; (2) to deed of contract with Mr. Shankerao Baba Mandrupkar for the supply of street name plates; and (3) to ditto with Messrs. John Fleming & Co. for the supply of 1,500 casks of Portland cement.

No. 8612. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 17543 and 17544, dated 27th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Hassan Alli Moola Adamji	Building at Dadar Kumbarwada.
„ Bala Dajiba	Do. at Dadar Road."

No. 8613. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 17792, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 8614. *Resolved*: "That, as applied for by the Commissioner in his letter No. 17179, dated 22nd instant, sanction be given to the acceptance by him of the tender of Messrs. Haji Daud Ismail & Co., the only one received, for the supply of 2,000 cases of kerosine oil of the Snowflake or White Rose brand of 150° proof, at the rate of Rs. 3-8-0 per case. The cost to be debited to the grant for kerosine oil lighting for the current year."

No. 8615. *Resolved*: "That, as applied for by the Commissioner in his letter No. 17415, dated 24th instant, sanction be given to the acceptance by him of the tender of Mr. Dewram Kesowji, the lower of the two tenders received, for the construction of the Sheep and Goat Market at DeLisle Road at schedule rates aggregating to Rs. 13,050-13-6."

Resolved : "That the following be *recorded* :—Letter No. 17077, dated 21st instant, from the Commissioner, reporting that he has accepted the tender of Mr. Muncherji Byramji, the lowest of six tenders received, for supplying and erecting wrought-iron railings in front and wrought-iron gates and fencing in rear of the new offices at a cost of Rs. 2,328."

No. 8616.

Resolved : "That, as applied for by the Commissioner in his letter No. 17072, dated 20th instant, and with reference to the resolution of the Committee, No. 5539, dated 13th September last, sanction be given, under section 69 (*c*) of the Municipal Act, to the variation of the contract with Messrs. Mistri, Bhedwar, Vachaghandi & Co. for the construction of a Manual Fire Brigade station at Mahim, whereby the contract period shall be extended up to 30th instant, and the establishment charges on account of the work for the additional period shall be paid by the Contractors."

No. 8617.

Resolved : "That, as applied for by the Commissioner in his letter No. 17178, dated 22nd instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Sitaram Luxuman & Co., whereby their deposit money and the ten per cent. retentions on their contract for the construction of house connections in the Agripada District may be refunded to them."

No. 8618.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 17246, dated 22nd instant, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,500 from savings in the grant for IV, streets and buildings, A, Inspection and Supervision, section I, outdoor establishment, to General Department, section 4, printing, streets and buildings, to meet excess on the latter heads due to the annual repairs and supply of contract forms being printed a second time and to several new forms having been introduced in the account system of the Engineer's office and the ward establishment."

No. 8619.

Resolved : "That, as applied for by the Commissioner in his letter No. 17080, dated 21st instant, sanction be given to the transfer of Rs. 390,

No. 8620.

from savings in the grant for conservancy branch, II, labour, B, surface drain cleaning (feed of bullocks), to Municipal Commissioner's personal Office Establishment, section II, superior staff, to meet acting allowance payable during the absence of the Assistant to the Commissioner on privilege leave for three months."

No. 8621. *Resolved* : " That, as applied for by the Commissioner in his memorandum No. 17389, dated 24th instant, sanction be given to the transfer of Rs. 250 from savings in the grant for Elphinstone Circle gardens, section III, D, sand, turf and manure, to section 2, contingencies, to meet excess on the latter head."

No. 8622. *Resolved*: " That, as applied for by the Commissioner in his letter No. 17419, dated 24th instant, sanction be given, under section 21 (4) of the Municipal Act, to the charging of Rs. 2 per copy of the Election Roll which will come into operation from 10th proximo."

No. 8623. *Resolved*: " That, as applied for by the Commissioner in his letter No. 17498, dated 25th instant, sanction be given, under section 69 (3) of the Municipal Act, to the variation of the contract with Messrs. Behramji Jehangirjee & Co. for filling in the low-lying ground at the Victoria Gardens, whereby the contract time shall be extended from 15th December 1892 to 12th July 1893."

No. 8624. *Resolved* : " That the following be *recorded* :—Letter No. 17420, dated 24th instant, from the Commissioner, reporting that he has sanctioned the purchase of 5 pairs of bullocks from Messrs. Kharsedji & Sons, Kirkee, at a cost not exceeding Rs. 200 a pair. The total cost, Rs. 1,000, to be debited to the grant of Rs. 2,400 for the purchase of bullocks for the meat-vans."

No. 8625. *Resolved* : " That, as applied for by the Commissioner in his letter No. 17075, dated 20th instant, and with reference to the Committee's resolution No. 13448, dated 15th March last, sanction be now given to the suit therein referred to, being filed in the Court of Small Causes, against Mr. Adam Aba Patel and Mr. Khursetji Kawasji Daruwalla for the recovery of Rs. 273-15-2."

Resolved : " That, as applied for by the Commissioner in his letter No. 17581, dated 27th instant, and with reference to the resolution of the Committee No. 4860, dated 23rd August last, sanction be now given to the filing of a suit against Messrs. Karim Mahomed Jamal, Husein Jamal and Ahmed Jamal, for the recovery of Rs. 212-7-0 instead of Rs. 266-15-0 in respect of property, B ward, No. 208, Nagdevi Road."

No. 8626.

Resolved : " That, as applied for by the Commissioner in his letter No. 17583, dated 27th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Mr. Lakhmidas Shamji for the construction of the Manual Fire Engine station at Bhuleshwar whereby the contract time shall be extended from 7th idem to 7th proximo."

No. 8627.

The consideration of items 19, 20, 21, 22, 23, 24, 25, 27, 28, and 29 on the agenda paper was postponed till next week.

Resolved: "That, as applied for by the Commissioner in his letter No. 17074, dated 20th instant, the Corporation be recommended to sanction the payment from surplus cash balance of Rs. 1,087 for the purchase from Messrs. Venku Balloo & Co., the contractors for building the new Municipal offices, of glazed moulded coping tiles and quarry glass, for future repairs to the building."

No. 8628.

Resolved : " That the following be *recorded* :—Letter, dated 24th instant, from H. H. Aga Jungi Shah and Sir Jamsetjee Jejeebhoy, *Bart.*, conveying the thanks of the memorialists for the action taken by the Corporation and the Standing Committee by sanctioning the improvement of Matharpakhadi Road, and earnestly hoping that the Corporation will before long see their way to likewise sanction the proposal for widening the road from C, on the plan, to Rose Cottage Lane."

No. 8629.

Resolved: " That the following be laid on the table :— Letter, dated 25th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week, for the month of October last, and compared them with the general and subsidiary ledgers and journals, and found them correct. Forwarding the usual summary and statement of their scrutiny of accounts."

No. 8630.

Resolved: "That the following be *recorded*:—Memo-
No. 8631. randum No. 17468, dated 25th instant, from the Commissioner, forwarding analyses of water as under :—

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir on the 28th October 1893.

	Parts per million.
Free Ammonia	·04
Albuminoid Ammonia	·14

Sample of partly filtered Tulsi water taken from the distributing tank, Malabar Hill Reservoir, on the 28th October 1893.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·12

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 30th October 1893.

	Parts per million.
Free Ammonia	·04
Albuminoid Ammonia	·15

Sample of filtered Vehar water obtained from the Vehar filters on the 30th October 1893.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·08

Sample of Tansa water drawn from a hydrant on 27" main, Arthur Road, on the 6th November 1893.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·10 "

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi Pawai and Tansa Lakes for the week ending 26th November 1893.

The consideration of the Budget Estimates for 1894-95 was resumed.

Executive Engineer's Department—contd.

Streets and Buildings.

The increase is—

	Rs.
Peon's clothing	160

The decreases are—

Drawing materials	Rs. 400	
Printing	„ 500	
Fees for summonses	„ 500	
		1,400
Net Decrease ...	Rs.	1,240

The estimate for this branch was passed at Rs. 86,677.

(*The grant for the current year is Rs.* 87,917.)

* *See* Appendix **B.**

Public Lighting.

The increases are—

		Rs.
Gas lighting	Rs. 241	
Kerosine oil lighting	„ 4,178	
		4,419
Less decrease—		
Gas lighting, contingencies		3,095
Net Increase ...	Rs.	1,324

The estimate for this branch was passed at Rs. 3,22,734.
(*The grant for the current year is Rs.* 3,21,410.)

Road Watering.

The increases are—

Bhisti watering, watering by carts and proportion (⅜ths) of cost of cart repairs	Rs.	10,656
Less decrease—		
Providing 30 hydrants and 1,000 feet of Merryweather's patent rubber line and canvas hose ...	„	6,000
Net Increase ...	Rs.	4,656

The estimate for this branch was passed at Rs. 82,400.
(*The grant for the current year is Rs.* 77,744.)

Road Repairs and Maintenance.

The decreases are—

Section 1—Purchase of road metal, &c.			
„ 2—Cart hire and labour, &c.		Rs.	41,575
„ 4—Maintenance of steam rollers			
„ 5—Stores and contingencies			
„ 7—Water-supply to chowkies at Null Bazar, &c.		„	1
„ 8—Purchase of stone-breaking machine ...		„	9,270
„ 9—Repairs to bridges, culverts, &c. ...		„	3,000
„ 10—Road-side trees, fencing and maintenance		„	3,500
„ 12—Telephone connections		„	200
		Rs.	57,546
Less increase in VI—Rent.		„	37
Net Decrease ...		Rs.	57,509*

The estimate for this branch was passed at Rs. 3,50,910.
(*The grant for the current year is Rs.* 4,08,419.)

* The Commissioner states that the decrease under Streets and Buildings is owing to the Executive Engineer having submitted carefully prepared road repairs estimates for the area to be repaired at so much per square yard, instead of the items hitherto shown in the Schedule and detailed Budget Estimates, an arrangement which will materially facilitate work.

Street Improvement.

The increase is—

Purchase of tin-plates and street-boards ... ... Rs. 1,500

The estimate for this branch was passed at Rs. 1,02,500.

(*The grant for the current year is Rs.* 1,01,000.)

The estimate for special provision for cleaning, lighting and repairing Port Trust wharf roads was passed at Rs. 38,842.

(*The grant for the current year is the same.*)

The total estimate for public works, including general supervision, drainage, water works, streets and buildings, special provision for Port Trust wharf roads, was passed at Rs. 14,56,504.

(*The grant for the current year is Rs.* 15,73,171.)

Health Department.—Proposed by K. M. Shroff, Esq., seconded by Harkisondas Nurrotumdas, Esq.—

"That the Health Department estimates of expenditure for 1894-95 be referred back to the Commissioner for reframing, in view of the estimates being materially reduced."

Carried.

Municipal Debt.—The estimate of expenditure for the several public loans, sinking funds and interest thereon, was passed at Rs. 20,71,951.

(*The grant for the current year is Rs.* 21,44,162.)

Pensions, &c.—Proposed by G. W. Roughton, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the proposed additional grant of Rs. 9,674-7-0 be reduced to Rs. 2,000-7-0."

Carried by 9 votes *against* 3.

The grant for pensions, gratuities, &c., was passed at Rs. 37,326.

(*The grant for the current year is Rs.* 34,000.)

Police charges.—The estimates for Police charges was passed at Rs. 4,00,000.

(*The grant for the current year is Rs.* 3,63,345.)

Education.—Considered letter, dated 26th October 1893, from the Honorary Secretary, Victoria Jubilee Technical Institute, asking that the grant towards the institution be increased from Rs. 10,000 to Rs. 20,000.

It was agreed that the estimate of the grant towards the institute be retained at Rs. 10,000 instead of being passed at Rs. 20,000, as entered in the Budget.

It was also agreed that the estimate of Rs. 1,000 for female medical scholarships be omitted from the Budget.

The estimate of the grant towards Education was passed as under :—

Primary Education	Rs.	59,135
School for deaf and dumb mutes	„	1,800
Veterinary College	„	2,500
Victoria and Albert Museum	„	11,200
Victoria Jubilee Technical Institute	„	10,000
Joint Schools Committee's Establishment	„	4,800
Total ...	Rs.	89,435

(*The grant for the current year is Rs.* 91,032.)

Hospitals.—The estimate of Rs. 3,108 for the establishment for proposed Small-pox and Cholera Hospitals was struck out.

Proposed by Kaikhosro N. Kabraji, Esq.—

"That the estimate of Rs. 3,000 towards the Jaffer Sulliman Dispensary for Women and Children be struck out."

Not seconded.

The estimate of expenditure in respect of Hospitals was passed at Rs. 57,000 as under :—

Gokuldas Tejpal Hospital...	Rs.	36,000
Jaffer Sulliman's Dispensary for Women and Children	„	3,000
Leper Asylum maintenance	„	18,000
	Rs.	57,000

(*The grant for the current year is Rs.* 60,108.)

Discretional Contingencies.—The estimate for discretional contingencies was passed at Rs. 7,000.

(*The grant for the current year is the same.*)

Auditors' allowance.—The estimate for Auditors' allowance was passed at Rs 10,000.

(*The grant for the current year is the same.*)

Election expenses.—The estimate for election expenses was passed at Rs. 10,000.

(*The grant for the current year is Rs.* 500.)

Municipal Buildings Fire Insurance Fund.—The estimate for this charge was passed at Rs. 3,000.

(*The grant for the current year is the same.*)

Special Extraordinary Works debitable to current revenue.—The Commissioner said that, in view of the other reductions which had been made in the estimates, he withdrew items Nos. 1, 2, 5, 7, 13, 15, 17, 18, 20, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 36, 37, 39, 41 and 42 from the list of works included in detailed statement No. 12.

Thereupon, it was agreed that the following estimates, amounting to Rs. 80,854, be passed :—

	Rs.
Drainage.	
Improving and enlarging the existing storm-water drains in Chamar Lane	7,813
Paving the flooring of the old boiler house at Love Grove	1,245
Removal of A, B and C Wards drainage chowki from Charni Road to Mint Road	1,507
Sanitary and other miscellaneous works,	
Masonry tank with stone coping, pavement, drains, &c., at Bandora Slaughter Houses	657
New masonry water drinking trough at Bori Bunder Stables	536
Laying tarred metal outside washing stones at the Dhobiwada	2,813
New iron drinking troughs at the Kamathipura and Agripada Milch Cattle Stables	550
Paving the compound of the Bori Bunder Stables with set stones from the public street to the water tank	13,500
Re-construction of the latrines in Dhunjee Street ...	1,192
Erection of a new office and chawl at Haines Road Cemetery	13,433
Drainage.	
Miscellaneous drainage works	5,000
Storm-water drain in Kalachowki Road	10,534
Streets and Buildings.	
Making of streets which have become public under the Municipal Act	5,000
Sanitary and other miscellaneous works.	
Construction of a hopper at the Sonapur Night-soil Depôt	2,118
Latrines and urinals	12,000
Water closet accommodation at C and E Wards, Health Department	1,400
Constructing a hopper at Parel village	1,556
	Rs. 80,854

(*The grant for the current year is Rs.* 81,292.)

It was resolved that a special meeting of the Committee be held on Monday, the 4th instant, at 3 p. m. for the further consideration of the Budget Estimates.

BOMBAY, *4th December* 1893.

AT a special meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; THE HON'BLE MR. FAZULBHOY VISRAM ; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S. H. A. ACWORTH, Esq., I.C.S., Commissioner ; the HEALTH OFFICER ; the CHIEF ACCOUNTANT ; and the SECRETARY.

The signing of the minutes of the meeting held on 29th ultimo, was postponed.

A note was received by the Secretary from Mr. Carroll, stating that, on account of his having had to proceed to Madras, he cannot be present at this meeting or at the meeting to be held on the 6th instant.

HEALTH DEPARTMENT.

The amended estimates for this department received from the Commissioner on the 4th instant, and circulated to the Committee the same day (showing a decrease of Rs. 66,824), were now considered.

General Supervision.—The item of Rs. 2,000, fees for summonses, was reduced to Rs. 1,000.

The increase is Rs. 280 for clothing. The net decrease is Rs. 720.

The estimate was passed at Rs. 44,760.

(*The grant for the current year is Rs.* 45,480.)

Conservancy Branch.—The schedule of appointments framed under section 79 of the Municipal Act, already sanctioned, was modified under section 79 (2) to allow of the following modifications therein :—

The entry of the appointment of—

1 Sub-Inspector on Rs. 30 a month and of conveyance allowance of Rs. 25 a month to Veterinary Inspector	Rs. 360 a year,	
Do. do. Rs. 20 a month to Assistant Veterinary Inspector	240	„

The entry of—

1 Farrier on Rs. 20 a month	240	„
1 Stable Mukadam on Rs. 15 a month	180	„
2 Halalkhor Mukadams on Rs. 15 a month each ...	360	„
	Rs. 1,680	„

The insertion, for B, F and G Wards, of—

	Rs.	
13 cart drivers at Rs. 9½ each a month	1,482	a year.
12 scavengering men at Rs. 9 each a month ...	1,296	,,
6 Do. women at Rs. 6 each a month ...	432	,,
Rs.	3,210	,,

Surface Drain-cleaning (for F and G Wards).

The insertion of—

6 cart drivers at Rs. 9½ each per mensem	684	a year.
6 men ,, 9 ,, ,, ...	648	,,
6 women ,, 6 ,, ,, ...	432	,,
Rs.	1,764	,,

The increases are as under:—

	Rs.	a.	p.
Establishment as above...	6,101	0	0
2.—Labour including feed of cattle—			
Feed of bullocks	4,032	0	0
Scavengering charges payable to the Tramway Company	739	0	0
Surface Drain-cleaning—			
Feed of bullocks	1,764	0	0
New Stock—			
Purchase of bullocks	3,400	0	0
56 Dust-bin moveable carts at Rs. 100 each ...	5,600	0	0
6 Drain carts at Rs. 150 each...	900	0	0
Rent—			
Ground rent payable to Govt. for ground at Kurla.	757	14	5
Port Trust ground, Frere Road	1	0	0
Municipal taxes on buildings in charge of the Health Department	200	0	0
Telephone connection	200	0	0
Rent of Government land at Sewri	22	11	0
Rent of temporary quarters of Biggaries ...	2,400	0	0
Water-supply	696	0	0
Cumblis for scavengers and drain-cleaning cart drivers	28	8	0
Total Increase ...	26,842	1	5

Less decreases—

	Rs.		
Labour, &c.—			
Strength below maximum	3,500		
Increased rations for bullocks	2,377		
Cost of feed of bullocks below strength...	4,500		
Surface Drain-cleaning—			
Strength below maximum	1,000		
Increased rations for bullocks	1,125		
Cost of feed of bullocks below maximum strength	2,500		
Disposal of Town Sweepings—			
Earth to cover kutchra deposits... ...	14,120		
Repairs—			
Scavengering, drain-cleaning and dust-bin carts	2,000		
Rent of Mahim stables ground	24		
Rent of Government land at Colaba ...	1,200		
	32,346	0	0
Net Decrease ...	5,503	14	7

The total estimates for Conservancy were passed at Rs. 6,53,519-6-0.

(*The grant for the current year is Rs.* 6,59,023.)

Halalkhor Branch.

The increases are as under :—

	Rs.	a.	p.	Rs.	a.	p.
Establishment charge partly debitable to this branch	553	0	0			
Increase in scavengering establishment to be employed below maximum ...	1,000	0	0			
				1,553	0	0

Less decreases—

	Rs.	a.	p.			
Feed of bullocks below maximum strength	7 000	0	0			
Repairs to night-soil carts	2,020	0	0			
New rolling stock	650	0	0			
Increased rations for weak bullocks...	1,002	12	0			
				10,672	12	0
Net Decrease ...				9,119	12	0

The estimate of expenditure in respect of the Halalkhor Branch for the year 1894-95 was passed at Rs. 4,14,886-10-0.

(*The grant for the current year is Rs.* 4,24,006-6-0.)

Markets and Slaughter Houses.—The schedule of appointments framed under section 79 of the Act, already sanctioned, was modified under section 79 (2) to allow of the following modifications therein :—

The insertion of the following new appointments :—

1	Sub-Inspector	on	Rs. 75	a month	or Rs.	900	a year.
1	Do.	on	„ 20	„	„	240	„
1	Clerk	on	„ 20	„	„	240	„
2	Clerks	on	„ 30	„ each	„	720	„
3	Peons	on	„ 10	„ „	„	360	„
4	Do.	on	„ 10	„ „	„	480	„
1	Havildar	on	„ 12	„	„	144	„
3	Peons	on	„ 9	„ each	„	324	„
3	Labourers	on	„ 9	„ „	„	324	„
3	Meat-van drivers	on	„ 9	„ „	„	324	„
					Rs.	4,056	a year.

Also to allow of the entry of the following reduced wages :—

71	Labourers reduced from Rs. 11 a month to Rs. 9 a month ...	Rs.	1,704 a year.
4	Private market peons reduced by Rs. 2 per month each	„	96 „
		„	1,800
	Net Increase ...	Rs.	2,256

The increases are as under :—

	Rs.	
Establishment as above	4,056	
Printing, stationery, &c....	170	
Clothing for peons, &c.	1,080	
Renewal of notice boards	500	
Water supply	5,360	
		11,166
Less decreases—		
Establishment	1,800	
Strength below maximum	1,224	
Feed of bullocks	2,000	
Lighting, &c., Crawford and other Markets	3,400	
Renewal of 22 meat-vans	13,200	
Purchase of stamping machine	2,000	
Repairs to Markets and Bandora Slaughter Houses	12,172	
		35,796
Net Decrease ...		24,630

The estimate was passed at Rs. 1,33,948-10-9.
(*The grant for the current year is Rs.* 1,58,578-10-0.)

Registration of Births and Deaths.—The increase is—

Clothing for peons, Registration Karkuns..... Rs. 1,488

This estimate was passed at Rs. 21,522.
(*The grant for the current year is Rs.* 20,034.)

Cemeteries.

The decreases are—

		Rs.
Firewood	Rs. 1,880	
Repairs to Chowkies and Chawls	„ 199	
		2,079
Less increases—		
Clothing for Hearse-drivers	Rs. 120	
Overcoat for monsoon for Hearse-drivers ...	„ 25	
Water supply	„ 54	
		199
Net Decrease ...		1,880

The estimate was passed at Rs. 8,278-3-6.
(*The grant for the current year is Rs.* 10,158-3-6.)

Laboratory.—This estimate was passed at Rs. 600.
(*The grant for the current year is the same.*)

Mahalaxumi Dhobiwada.—This estimate, including Rs. 30,000 for water supply, was passed at Rs. 33,386.
(*The grant for the current year is Rs.* 33,338.)

Infectious Diseases.—On the motion of A. G. Viegas, Esq., the estimate under this head for special measures in the event of an outbreak of epidemic disease was reduced from Rs. 5,606 to Rs. 4,000.

The total estimate was passed at Rs. 4,494.

(*The grant for the current year is Rs.* 6,000.)

Milch Cattle Stables and Rooms.—The increases are Rs. 322 on account of peons' clothing and water supply.

The estimate was passed at Rs. 11,562.

(*The grant for the current year is Rs.* 11,240.)

Tank Conservancy.—This estimate was passed at Rs. 6,144.

(*The grant for the current year is the same.*)

The estimates for the Public Health Department, including General Supervision and Conservancy, Markets and Slaughter Houses, Registrations of Births and Deaths, Cemeteries, Laboratory, Dhobiwada, Infectious Diseases, Milch Cattle Stables and Rooms, Tank Conservancy, Maintenance of Rastamji Jamsetji Dharmashala, Falkland Road, and contribution to Government for vaccination, after deducting Rs. 20,000 on account of anticipated savings under different minor heads, were passed at Rs. 13,31,158-14-3.

(*The grant for the current year is Rs.* 13,92,199-8-10.)

LOAN WORKS BUDGET.

The estimate of income from anticipated balances on 1st April next and Loan Works establishment fund was passed at Rs. 2,22,903-12-8. The total estimate of income from Loans to be raised for works already sanctioned by the Corporation was passed at Rs. 10,00,000.

Proposed by G. W. Roughton, Esq, seconded by the Hon'ble Mr. Javerilal U. Yajnik—

"That in the Loan Works Budget there be only included (*a*) provision for the disposal of such sums, raised for Loan Works, as have not been expended; and (*b*) provision for the raising or application of such funds as may be necessary for the carrying out of such works as have already been sanctioned by the Corporation."

After discussion, Mr. Roughton said he would not press this motion to a division.

The estimate of Rs. 1,080 for travelling allowance of Rs. 90 per mensem to the Drainage Engineer on Special Duty was *struck out.*

In accordance with the recommendation of the Commissioner, it was agreed that the following items be *struck out* of the estimates and charged to savings on other Loan Works as per statement "*A*" :—

	Rs.	a.	p.
Lifting sewage at the junction of Marine Lines 15" pipe sewer and the Queen's Road ovoid sewer, and at the junction of Queen's Road sewer and the main sewer at 10th Khetwadi Lane	1,86,197	0	0
Sewerage of Parel on the gravitation system ...	81,620	0	0
Storm-water drain in Cruickshank Road ...	27,073	0	0
	2,94,890	0	0

The estimates of the establishments for these works, *viz.*, Rs. 2,940, Rs. 4,680 and Rs. 1,170 were *struck out,* the charges being transferred to the debit of the savings in question.

Statement "A."

	Rs.	a.	p.
44 *Lakhs Sanitary Works Loan*—			
1. Surface drainage works	2,106	4	6
2. Provision for shaft ventilators	704	15	6
3. Survey for pipe sewers	5,113	0	0
4. Closing storm-water openings in Frere Road	8,087	6	6
	16,010	10	6
7 *Lakhs Sanitary Works Loan*—			
Drainage of Fort	40,535	0	9
12 *Lakhs Drainage and Water Works Loan*—			
Queen's Road house sullage connections ...	2,12,914	3	6
D.—Miscellaneous Works Loan of Rs. 10,08,500—			
9" Pipe sewer, Bellasis Road	47	1	11
E.—Agripada House Sullage Connections—Loan of Rs. 2,48,000—			
Agripada house sullage water connections ...	16,674	12	10
	2,86,181	13	6

The estimates of Rs. 3,65,438 for sewerage of the old Race Course (not yet sanctioned by the Corporation) was *struck out.*

The estimate of Rs. 9,252 for establishment was also *struck out.*

The following estimates for other works, not yet sanctioned by the Corporation, were passed :—

Sewerage of Mazagon District on gravitation system	Rs.	3,32,661	0 0
Storm-water masonry drains with masonry gullies in the Khetwadi District	„	90,970	0 0

On the motion of K. M. Shroff, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik, it was—

Resolved : "That the estimates for the construction of roads, as follows, be *struck out* :—

Extension of Frere Road to Mazagon Land Company's Estate	Rs.	6,00,000
Road from Esplanade Road near Framji Kawasji Institute to Queen's Road	„	3,75,000
Road on Tulsi pipe line from Haines Road to Mahim .	„	2,46,882
	Rs.	12,21,812"

The estimate of Rs. 4,89,724 for new water distributing mains was *struck out.* Estimates 1 and 2, as follows, were passed :—

1. Additional filters at Malabar Hill Reservoir, including necessary alterations to existing filters ...	Rs.	2,00,000
2. New mains for various places, principally Agripada	„	50,000

The estimate of Rs. 20,979 for construction of milch cattle stables, Mody Bay, was passed.

The total of the estimated expenditure passed for Loan Works was Rs. 6,94,610,- or say Rs. 7,00,000, of which Rs. 4,00,000 will be required for the ensuing year.

The establishment charges for the works to be carried out as thus passed (on account of works sanctioned and to be sanctioned) amount to Rs. 77,062, and the amount to be expended next year for such works to Rs. 13,84,728; total Rs. 14,61,790, leaving a balance of Rs. 1,61,113-12-8 as per detailed statement No. 13.

BOMBAY, *6th December* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; CHIEF ACCOUNTANT; and the SECRETARY.

The minutes of the meeting held on the 29th ultimo, were signed, and the signing of the minutes of the special meeting held on the 4th instant was postponed.

The Introductory Remarks to the revised Budget Estimates were considered and approved.

No. 8891. On the application of the Commissioner, sanction was given to the investment of 3 lakhs of rupees, of which two lakhs form the balance of the four and a half lakhs loan for Fire Brigade stations, and one lakh forms part of the surplus cash balance. Such investment to be made at the discretion of the Commissioner.

Read the following :—

No. 11952 OF 1893-94.

BOMBAY, 1*st December* 1893.

TO THE COMMISSIONER.

SIR,—With reference to your endorsement No. 17587, dated 27th November 1893, on the Standing Committee's Resolution No. 8143 of the 22nd November 1893, I have the honour to report that the value of land in the locality in which Mr. Motishaw's house is situated is Rs. 20 per square yard. This price was paid by the Municipality for a piece of ground in September 1892. (2)—The rate put down in the agreement, *viz.* Rs. 50 per square yard, includes compensation payable to the party for that portion of the structure for which the Municipality would have had to pay if it had insisted upon its right to enforce the set-back when the party built within the set-back line. (3)—The total area of the ground enclosed within the set-back line measures about 3·33 square yards. The value of the portions of the structure standing within the set-back line, for which the Municipality would have had to pay, and which consisted of the plinth, ground floor posts, woodwork, &c., of the four upper storeys, was estimated at Rs. 100. This sum distributed over 3·33 square yards comes to Rs. 30 per square yard, which has been added to the value of the ground. (4)—It will be noticed that, in consideration of this provision, the printed words in the latter part of clause (2) in the agreement, *viz.*, "*but such rate shall not, exclusive of the unauthorised work, include compensation for any structure standing upon the said ground at the date of acquisition*," have been expunged, and those "give up to the Municipality the set-back land clear of all superstructure" have been substituted. This arrangement has been carried out to avoid disputes regarding the value of the old structure for which compensation is payable.—I have &c.,—M. C. MURZBAN, Executive Engineer.

No. 18060 *of* 2*nd December* 1893.

Forwarded to the Standing Committee.—H. A. ACWORTH, Commissioner.

No. 8892. *Resolved*: "That memorandum No. 18060, dated 2nd instant, from the Commissioner be *recorded.*"

The seal of the Corporation was affixed to deed of agreement between Mr. Dadabhai Kavasji Motisha and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property situated at Nos. 25-27, Bora Musjid Lane, Fort, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed, and at the rate of Rs. 50 per square yard for any land shown on the plan, to be there taken up, inclusive of any loss, damage or expense sustained by him by reason of such acquisition.

The seal was also affixed (1) to deed of indenture for land taken up from Messrs. Hurkisondas and Bhugwandas Nurotumdas for the new Love Grove Pumping Station; (2) to 1 attested duplicate of Tansa Water Works Loan Debenture No. 842 for Rs. 500, and 2 sub-divided Debentures of the Tansa Water Works Loan, Nos. 27591-98 and 27599-601, for Rs. 4,000 and Rs. 6,000 respectively.

No. 8895. *Resolved*: "That, as applied for by the Commissioner, in his memorandum No. 18366, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Read the following :—

No. S. D.-676 OF 1893-94.

BOMBAY, 28*th November* 1893.

To THE MUNICIPAL COMMISSIONER.

SIR,—With reference to your memo. No. 17412, dated 4th November 1893, I have the honour to forward the accompanying tabulated statement marked $\frac{S\ A}{391172}$ of the four tenders received for the Umarkhady Sewerage Works, and which are herewith returned. (2).—It will be seen that the lowest tender is that of Messrs. Fakir Mahamad Babunbhai and Co., amounting to Rs. 2,41,985-0-0. (3)—I hesitate, however, to recommend the acceptance of that tender on the following grounds :—(*a*) The last work in which Messrs. F. M. Babunbhai and Co. were occupied for the Municipality was the Fort Pipe Sewer Work, the completion of which had to be taken out of the contractors' hands as will be seen on reference to the Commissioner's No. 8640, dated 20th August 1889. (*b*) That the difference between the tender of Messrs. F. M. Babunbhai and Co. and the next higher tender is only Rs. 6,888, or a percentage of 2·85 above the former. (*c*) That Messrs. F. M. Babunbhai and Co. require 24 calendar

months for the completion of the work, or 6 calendar months in excess of the time required under the next higher tender. I have ascertained from the Chief Accountant that the monthly allowance for the establishment for the works is entered on the Budget for next year at Rs. 584 per mensem, and at this rate the six extra months would absorb Rs. 3,504 out of the difference of Rs. 6,888, leaving a net difference of only Rs. 3,384. (4).—I beg, therefore, to recommend the acceptance of the next higher tender, *viz.* that of Messrs. Bulkley & Co. who have exceptional qualifications for the work and have satisfactorily carried out similar works for the Municipality. (5).—Their tender amounts to Rs. 2,48,873, or Rs. 22,900 less than the office estimate of Rs. 2,71,773. (6).—Since having submitted my proposals for the Umarkhadi Sewerage Works, it has occurred to me that two tidal flaps for flushing purposes and a catchpit for the collection of silt would be useful adjuncts to the new ovoid sewer. (7).—The cost of this additional work at Messrs. Bulkley & Co.'s rates will be Rs. 3,507, as shown by the accompanying two estimates marked respectively $\frac{S\ D}{391172}$. and $\frac{S\ E}{391172}$. (8).—If this be sanctioned, the total amount of the tender will be Rs. 2,52,380, or Rs. 19,393 less than the office estimate on which the grant has been framed. (9).—It will be observed that, for the purposes of comparison, I have considered the office estimate apart from the following items :—

(*a*) Removal of surplus excavated material		6,226
(*b*) Road repairs		24,143
(*c*) Contingencies		45,322
	Rs.	75,691
Office estimate as stated above		2,71,773
Total grant Rs.		3,47,464

(10).—If Messrs. Mistry, Bhedwar, Vachaghandi and Co.'s proposal under their letter, dated 23rd November 1893, to reduce their rate per 100 c. ft. for cement concrete from Rs. 75 to 60 were accepted, their tender would then amount to Rs. 2,56,208 or higher, even then, than either the tender of Messrs. F. M. Babunbhai and Co. or that of Messrs. Bulkley and Co.—I have, &c., JAMES W. SMITH, M. INST. C. E., Special Drainage Engineer.

No. 17736 OF 28*th November* 1893.

Forwarded to the Standing Committee. The Commissioner concurs with the Special Drainage Engineer and recommends Messrs. Bulkley and Co.'s tender for sanction.—H. A. ACWORTH, Commissioner.

Resolved : " That the consideration of memorandum No. 17736, dated 28th ultimo, from the Commissioner be postponed till next week, and that in the meantime he be requested to inform the Com-

No. 8896.

mittee what contracts have been executed by Messrs. Fakir Mahomed Babunbhai & Co. for the Municipality, and whether satisfactorily, and also as to why the Fort Pipe Sewer Works were taken out of their hands."

Considered memorandum No. 17684, dated 28th ultimo, from the Commissioner to the Secretary, forwarding application, dated 27th idem, from Mr. C. J. Hewett, late Chief Inspector, Water Works, renewing his application for a good service pension.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

No. 8897. "That, with reference to his memorandum No. 17864, dated 28th ultimo, the Commissioner be informed that the Standing Committee see no reason to vary their resolution No. 7637 of 10th idem."

Amendment, proposed by the Hon'ble Mr. Oxenham, seconded by Harkisondas Nurrotumdas, Esq.—

"That, with reference to the Standing Committee's Resolution No. 7637, dated 10th ultimo, sanctioning a monthly payment of Rs. 150 to Mr. C. J. Hewett, and memorandum No. 17864, dated 28th ultimo, from the Commissioner, sanction be now given, under the terms of No. 15 (*d*) of the Municipal Pension Regulations, to the grant of a special good service pension to Mr. Hewett, at the rate of Rs. 25 per month from 1st October last, in addition to the ordinary pension of Rs. 150 per month originally sanctioned."

On a division, the amendment was *lost*, the votes being 4 *for* and 6 *against*.

The original motion was *carried*.

No. 8898. *Resolved*: "That, as applied for by the Commissioner in his letter No. 17728, dated 28th ultimo, and under the Pension Regulations, sanction be given to the payment to Mr. Jagunath Vitoba, Registration Clerk, Assessment Department, of a monthly pension of Rs. 20 from 1st November 1893. The amount to be met from the grant for pensions and gratuities, current year's Budget."

Considered again letter No. 15162, from the Commissioner, to the Secretary, dated 26th October last, forwarding letters from Mr. Rienzi G. Walton, late Executive Engineer, dated 27th January and 9th June last, applying

for pension of Rs. 333-5-4 per mensem under the new regulations, in place of the Rs. 250 which he draws under the old rules.

Proposed by Bhalchandra K. Bhatawadekar, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik—

"That the Commissioner be requested to inform Mr. Walton, with reference to his letters of 27th January and 9th June last, that the Standing Committee are unable to comply with his request that his pension of Rs. 250 a month may be increased to Rs. 333-5-4 per mensem."

Amendment, proposed by Grattan Geary, Esq., seconded by Harkisondas Nurrotumdas, Esq.—

"That letter No. 15162, dated 26th October last, from
No. 8899. the Commissioner be forwarded to the Corporation with a recommendation that they will, as a special case, (1) permit Mr. R. G. Walton to withdraw his letter of 25th November 1892, in so far as it relates to his resignation of the Municipal service, the resignation of the post of Executive Engineer holding good; (2) grant him leave without pay from 24th November 1892 to 20th March 1893, the date of the confirmation of the new rules; (3) grant him from that date a pension of Rs. 333-5-4 per mensem; (4) the recovery from him of the amount of the pension at Rs. 250 per mensem already paid to him from 24th November 1892 to 20th March 1893."

On a division, there were 5 votes *for* the amendment and 5 votes *against* it, and it was *carried* as a substantive proposition by the vote of the Chairman.

Resolved: "That, as applied for by the Commissioner
No. 8900. in his letter No. 17870, dated 30th ultimo, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against the Manager, Agent, or Trustee* of the Mogul Burial Ground, Ward Nos. 2300 to 2309, Queen's Road, for the recovery of Rs. 81-5-0 in respect of water and halalkhor taxes and notice fees on account of chawl as per list submitted with the above letter."

Resolved: "That, as applied for by the Commissioner
No. 8901. in his letter No. 18035, dated 1st instant, sanction be given, under sections 211 and 517

* The words "Agent or Trustee" were inserted on the suggestion of Mr. Roughton,

(1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against the Manager, Agent, or Trustee of the Borah Burial Ground, Ward Nos. 2317 to 2319, Queen's Road, for the recovery of Rs. 81-2-0, being amount due for water and halalkhor taxes and notice fees on account of shed as per list submitted with the above letter."

No. 8902. *Resolved* : " That, as applied for by the Commissioner in his letter No. 17729, dated 28th ultimo, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes aginst Mr. H. W. Warden, Consulting Engineer for Railways, for the recovery of Rs. 40, being the amount of wheel tax due by him for the quarter ending 31st March 1892.

* " That, before proceedings are taken, the Commissioner be asked to despatch a registered letter to Mr. Warden and not to institute the suit until, in ordinary course of post, time has been given for a reply, and that the attention of the Commissioner be directed, before he files such suit, to the provision of the Small Cause Court Act as to institution of suits against persons residing out of the jurisdiction."

Read letter No. 17756, dated 28th ultimo, from the Commissioner to the Secretary, as under :—

SIR,—On 20th May 1891, a small quantity of land (21·87 square yards) was added to the road in front of house No. 847—851 in Jail Road East. The compensation is claimed on the one hand by Mr. Jalbhai Ardeshir Sett, and on the other by Dawood Jaffer Moorghiwalla, the occupant. The Standing Committee are aware that progress with the proposed Navroji Hill Road, for which a sum of Rs. 3,32,023 has been sanctioned, has been interfered with by the conflicting claims of Mr. Jalbhai A. Sett and the owners of houses standing on the ground required for the road, the former claiming to be the lessor and as such entitled to all compensation for ground. The latter maintaining that Mr. Jalbhai is merely the Fazindar, and that they themselves are, subject to his Fazindari rights, the real owners. The present case appears to be one in which these contrary pretensions can be put to the test, and the Solicitors advise that an interpleader suit in the Small Cause Court would be the best course to adopt. The amount of compensation due for the land (Rs. 437-6-4) would be paid into court, and notice given to the contending parties to prove their respective claims. The Solicitors write : " the decision in this case may very

* This para. was added on the suggestion of Mr. Roughton.

possibly form a useful guide in dealing with similar cases in future on the same estate, but it is impossible to say that it will necessarily establish a principle which could safely be followed in every such case; that decision of course can be in no way binding on any one who is not a party to it, so that even assuming the circumstances of another case and the terms of tenure were found to be exactly similar, it would still be open to the owner of the building to make a similar claim, and it is also conceivable that, if his case were represented in a different way or before another Judge, the result might be different." Admitting these possibilities, there can yet be little doubt that the decision of this case will form a precedent of great value, and I recommend that sanction to the institution of the interpleader suit be given.—I have, &c., H. A. ACWORTH, Commissioner.

No. 8903. *Resolved*: "That, as applied for by the Commissioner in his letter No. 17756, dated 28th ultimo, sanction be given to the institution of an interpleader suit to establish the claim of the person entitled to compensation from the Corporation, amounting to Rs. 437-6-4 in respect of 21·87 square yards of land added to the road in front of house No. 847—851, Jail Road East."

Considered letter No. 17868, dated 30th ultimo, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to report that a further grant for coal is required for the Love Grove pumping engines to complete the supply to the end of February. The consumption is considerably over the guaranteed amount of 4 lbs. per horse-power per hour, being not less than 5½ lbs. On this fact being established, the Commissioner has power to reserve payment of the 10 per cent. deposit of £2,396, which is returnable to the contractors "on receipt of the certificate of the said Engineer on the expiration of one year from the date of the completion of the erection of the said machinery that the same has performed the work required to be done by it as hereinbefore recited."

(2) 300 tons more are required and I propose to purchase Bengal "Sanctoria" coal at Rs. 15¾ per ton delivered at Love Grove. This will cost Rs. 4,725, to which I request sanction. The amount can be paid out of surplus cash balance; amount reserved in the budget estimates for 1894-95 for probable extra grants up to the end of 1892-93, Rs. 1,35,079. Deduct amount of grants already sanctioned, excluding temporary advances to be adjusted hereafter, Rs. 20,556. Further expenditure recommended for sanction, Rs. 77,017-5-5. Total Rs. 97,573-5-5; available Rs. 37,505-10-7.—I have, &c., H. A. ACWORTH, Commissioner.

No. 8904. *Resolved*: "That letter No. 17868, dated 30th ultimo, from the Commissioner to the Secretary, be forwarded to the Corporation, with a recom-

mendation that sanction be given to an additional grant of Rs. 4,725 from surplus cash balance to meet the cost of coal required for the Love Grove Pumping Station up to the end of February 1894."

No. 8905. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 17951, dated 1st instant, the Committee approve of the purchase of 5,000 cases of Kerosine oil, 150° proof of the White Rose Brand, from Messrs. Heptula Sheik Adam & Co., at the rate of Rs. 3-7-8 per case of two tins.

"That the Corporation be recommended to sanction an advance of Rs. 17,395-13-4 from surplus cash balance for the purchase of the oil. The amount to be adjusted from the grant for Kerosine oil lighting, budget for 1894-95.

"That the 5,000 cases of oil, if purchased, be insured."

No. 8906. *Resolved* : "That, as applied for by the Commissioner in his letter No. 17882, dated 30th ultimo, sanction be given to the fixing of a penstock with shutter and screen in the chamber outside the new engine house at Love Grove by Messrs. George Gahagan & Co., at a cost of Rs. 3,350.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary as the work is urgent and there is no likelihood of a better offer being received."

No. 8907. *Resolved* : "That, as applied for by the Commissioner in his letter No. 17881, dated 30th ultimo, and with reference to the Committee's resolution No. 7006, dated 25th October last, sanction be given to the retention of the services of the Surveyor on Rs. 70 a month and the lascar on Rs. 10 a month up to the end of December 1893, for the work of preparing estimates for house connections at the Parel village. The cost to be met out of savings in the grant for the Parel Government House Gate Road and drainage works."

No. 8908. It was agreed that the following be circulated and brought on for consideration next week:—

Letter No. 18049, dated 1st instant, from the Commissioner, on the subject of the return of the deposit of Messrs. Sitaram Luxmon & Co., the contractors for the construction of the Tansa pipe line from Ghatkopar to Kalachowki Road.

No. 8909. *Resolved* : " That letter No. 18082, dated 2nd instant, from the Commissioner, on the subject of additional grant for law charges and of accompaniments thereto be printed and circultated and brought on for consideration at next meeting."

No. 8910. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 17665, dated 28th ultimo, sanction be given to the payment of Rs. 96-0-0 as per abstract submitted for charges on account of the rate-payers' bye-election held on 20th idem. The amount to be met from the current year's grant for election expenses."

No 8911. *Resolved* : " That the consideration of the report of the Health Officer for the third quarter of 1893 be postponed till next week."

No. 8912. *Resolved* : " That, as applied for by the Commissioner in his letter No. 17886, dated 30th ultimo, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 721-4-0 from savings in the grant for water works, maintenance, I, establishment and labour, E, maintenance, to new works, water works, repointing with Indian patent stone the remaining portions of the inner faces of the outer walls of the Bhandarwada Reservoir, in order to provide for cost of drain and pipes for ground water under floor and outside walls which tend to damage floors and walls in the monsoon, and for plastering four more arches."

No. 8913. *Resolved* : " That the consideration of the following be postponed till the petitioner's pension question is before the Committee:—Letter, dated 24th ultimo, from Mr. Cursetji Dhunjibhoy, stating that until the 31st October 1893 he was an Inspector in the Water Works Department, having joined that department on 5th October 1869, thus completing 24 years and 26 days' service, leaving only 11 months and 4 days to enable him to draw his full pension. Stating that being over 60 years of age, the limit prescribed by the Commissioner for compulsory retirement, applicant made a representation for a year's extension to enable him to secure the full pension, which was refused. Adding that during all his service he only enjoyed 6 months and 11 days' leave. Requesting the Committee to favourably consider his case.

"That in the meantime the Commissioner be asked to furnish the Committee with all papers on the subject and with copies of his circulars or notifications on the subject of retirements, dated 20th June and 12th July last."

No. 8914. *Resolved* : "That letter No. 17646, dated 28th ultimo, from the Commissioner, on the subject of the adjustment of the cost of the Victoria garden improvement be printed and circulated and brought on for consideration next week."

No. 8915. *Resolved*: "That the Progress Reports up to the end of September 1893 of new works in course of construction be laid on the table and brought on for consideration next week."

Read letter No. 17181, dated 22nd ultimo, to the Secretary, as under :—

SIR,—With reference to the resolutions of the Corporation marginally noted, I have the honor to state that (1) a building for the ward office at Dadar was purchased at a cost of Rs. 14,140 ; (2) the rocky and unusable parts of the Roman Catholic portion of the Sewri Cemetery were filled in with earth at a cost of Rs. 9,877-13-5, so as to render them available for burial purposes ; and (3) 1,000 boundary stones were purchased and fixed along the pipe line from Kurla to Vehar and from Bandra to Tulsi at a cost of Rs. 1,312-8-0.

No. 653 of 25th April 1888.
„ 7739 of 13th March 1890.
„ 1716 of 6th June 1892.

The first of these works was included in the loan for Rs. 11,82,000 applied for in May 1888, but was disallowed by the Government of India. The second was expected to cost much more than it did, and was therefore intended to be met by a loan. Neither of these works nor the third would now be proposed to be met from loan, and as under Corporation Resolution No. 892 of 28th July 1887 works under Rs. 20,000 are meant to be met from cash revenue, I request the Standing Committee to move the Corporation to sanction the adjustment of Rs. 25,330-5-5 out of surplus cash balance.

Amount reserved in the Budget Estimates for the year 1894-95 for probable extra grants up to the end of the current financial year ...			Rs. 1,35,079
Deduct—			
Amount of grants already sanctioned, excluding temporary advances to be adjusted hereafter.	Rs.	20,556	
Expenditure recommended for sanction ...	„	31,687	
			„ 52,243
Balance available ...			Rs. 82,836

I have, &c., H. A. ACWORTH, Commissioner.

Resolved : " That letter No. 17181, dated 22nd ultimo,
No. 8916. from the Commissioner, be forwarded to the Corporation, with a recommendation that sanction be given to the adjustment of the three following amounts aggregating Rs.25,330-5-5 by debit to surplus cash balance :—(1) building ward office at Dadar, Rs. 14,140 ; (2) filling in portion of the Sewri cemetery, Rs. 9,877-13-5; and (3) purchase of boundary stones for fixing along the pipe line from Kurla to Vehar and from Bandra to Tulsi, Rs. 1,312-8-0."

It was agreed that the consideration of the following be
No. 8917. postponed till next week :—Memorandum No. 16390, dated 11th ultimo, from the Commissioner, forwarding letter from the Chief Accountant, reporting, with reference to the resolution of the Committee, No. 4646, dated 16th August 1893, regarding the keeping of stores accounts.

Resolved : " That, as applied for by the Commissioner
No. 8918. in his letter No. 17585, dated 27th ultimo, sanction be given to the purchase, for the Love Grove pumping engines from Messrs. Macbeth & Co., of one of Messrs. Green & Co.'s patent economisers with connection pipes and a thermometer, at a cost of Rs. 5,059. The charge to be met from the grant of Rs. 5,250 sanctioned by the Corporation.

" That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as Messrs. Macbeth are the agents of the makers, and as the economiser is urgently required."

Resolved : " That the following be printed and brought
No. 8919. on for consideration at a future meeting :— Letter No. 17182, dated 22nd ultimo, from the Commissioner, reporting, with reference to the resolution of the Corporation No. 204, dated 6th April last, on the subject of the lighting of the new Municipal Offices and the Arthur Crawford Markets by electricity."

It was agreed that the consideration of the following
No. 8920. be postponed till next week :—Memorandum No. 17073, dated 20th ultimo, from the Commissioner, reporting, with reference to the Corporation's resolution No. 5497, dated 11th September last, on the subject of the construction of unpaved footpaths on a better specification."

Resolved : "That the following be forwarded to the Commissioner for favour of report :—Letters, dated 22nd and 27th utlimo, from Mr. Fazulbhoy Peerbhoy, on the subject of the purchase of the right of collecting toll fees on the Mahim and Sion Causeways."

No. 8921.

Resolved : "That the following be forwarded to the Commissioner for favour of report :—Memorandum from the Municipal Secretary, forwarding petition, dated 22nd ultimo, addressed to the Corporation by the residents of Jagunath's Chawl, Fanaswadi, complaining of alleged inadequate water-supply thereat."

No. 8922.

Resolved : "That the following be circulated and brought on for consideration next week :—Memorandum No. 17338, dated 23rd ultimo, from the Commissioner, reporting on petition from Mr. Dosa Jivan on the subject of the projection of his building in Lohar Chawl Street."

No. 8923.

Resolved : "That letter No. 17291, dated 22nd ultimo, from the Commissioner, on the subject of the construction of a market at DeLisle and Curry Roads, be circulated and brought on for consideration next week."

No. 8924.

Resolved : "That, with reference to their application, dated 4th ultimo, Mr. Mahomed Ebrahim Naug and others be informed in accordance with Executive Engineer's report No. 11673, dated 25th idem, to the address of the Commissioner."

No. 8925.

The following return was read and *recorded* :—

Return of fire at Carnac Bridge Road, forwarded with the Commissioner's memorandum No. 17645, dated 28th November 1893.*

No. 8926.

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 3rd December 1893.

In reply to a question from Mr. Bhalchandra K. Bhatawadekar, the Commissioner said it is a fact that Rs. 1,200, or thereabout, have lately been stolen from the Assessment and Collection Department.

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* *See* Appendix C. † *See* Appendix B.

BOMBAY, 13*th December* 1893.

AT the meeting of the Standing Committee held this day, there were present:—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; the DEPUTY ACCOUNTANT; and the SECRETARY.

The minutes of the meetings held on the 4th and 6th instant, were signed.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Haji Daud Esmail & Co. for the supply of 2,000 cases of kerosine oil of the Snowflake or White Rose brand of 150° proof; (2) with Messrs. Sorabji Shapurji & Co. for the supply of iron castings for the remainder of the year 1893-94; (3) with Messrs. Cursetjee Jamsetjee Dadachanji & Co. for the construction of Souter Road and a storm-water drain along it; (4) with Mr. Muncherji Byramji for the construction of wrought-iron railing in front, and wrought-iron gates and fencing in the rear, of the new Municipal Offices; and (5) with Messrs. Ruttonji Bezonji & Co. for constructing compound wall and pavement in front and rear of the Offices.

No. 9308. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 18396, 18397 and 18398, dated 7th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission:—

Names of Owners.		Where.
Mr. Abdulla Khalifa	... Building at	Elphinstone Road.
„ Cowasji Naoroji Ghiwala	... Do.	Colaba Road.
„ Munchershaw Ruttonji Mody	... Do.	Forjett Street."

No. 9309. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 18858, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

Considered letter No. 18295, dated 5th instant, from the Commissioner to the Secretary, requesting sanction to the payment of a monthly pension of Rs. 105-0-8 to Mr. Dadaji Bhanaji, late Head Audit Clerk, Chief Accountant's Office, and also to the payment to Mr. Dadaji of a good service pension of Rs. 17-8-1 per mensem.

Proposed by A. G. Viegas, Esq., seconded by Hurkisondas Nurrotumdas, Esq.—

"That, as applied for by the Commissioner in his letter No. 18295, dated 5th instant, and under the terms of the Municipal Pension Regulations, 15 (*c*), sanction be given to the payment of a monthly pension of Rs. 105-0-8 to Mr. Dadaji Bhanaji, late Head Audit Clerk, Chief Accountant's Office, from 1st November 1893."

No. 9310.

Carried.

Resolved: "That, with reference to their resolutions Nos. 8965 and 9219, dated 7th and 11th instant respectively, the Corporation be recommended to sanction the payment of Rs. 1,500 to meet the cost of illuminating and enclosing addresses of welcome to the Right Hon'ble the Earl of Elgin, Viceroy Designate, and to Dadabhai Navroji, Esq., M.P."

No. 9311.

Read memorandum No. 18699, dated 11th instant, from the Commissioner, forwarding memorandum from the Under-Secretary to Government, Judicial Department, No. 7764, dated 8th idem, giving cover to copy of letter from the Accountant-General, to the effect that the amount payable by the Municipality on account of Police charges is Rs. 4,26,396 per annum, as against Rs. 4,00,000 entered in the Budget for next year.

Resolved: "That memorandum No. 18699, dated 11th instant, from the Commissioner, and its accompaniments, be forwarded to the Corporation."

No. 9312.

Read letter No. S. D. 723, dated 11th instant, from the Special Drainage Engineer to the Commissioner, reporting with reference to the Committee's Resolution No. 8896, dated 6th idem, as to what contracts have been executed by Messrs. Fakir Mahomed Babunbhai & Co. for the Municipality and whether satisfactorily, and, also, why the Fort pipe sewer works were taken out of their hands.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. R. G. Oxenham—

"That, as applied for by the Commissioner in his memorandum No. 17736, dated 28th ultimo, sanction be given to the acceptance by him of the tender of Messrs. Bulkley & Co., the second lowest of the four tenders received, for the Umerkhadi Sewerage Works, at schedule rates aggregating Rs. 2,48,873."

Amendment proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the Standing Committee are of opinion that the lowest tender should be accepted."

It was pointed out, that the only question before the meeting, was the sanctioning, or otherwise, of the tender recommended by the Commissioner, and thereupon the amendment was *withdrawn*.

On a division there were 5 votes *for*, and 6 votes *against*, the motion which was *lost*.

No. 9313. *Resolved* : "That, as applied for by the Commissioner in his letter No. 18423, dated 7th instant, the Corporation be recommended to sanction an extra grant of Rs. 2,500, from surplus cash balance for the book value of water used at the Love Grove Pumping Station during the current year."

Read letter No. 18270, dated 5th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to the provision of Rs. 25,000 in the Loan Works Budget for 1893-94, for the construction of a road from Vehar to Tulsi with a light tramway to carry pipes, I have the honor to state that Messrs. Walsh, Lovett & Co., who have between six and eight miles of rails, that is, three to four miles of tram line on hand, offer to supply the rails at the rate of Rs. 80 per ton. The Engineer reports that they are in good condition, quite efficient and suitable for the proposed line, and that the rate is fair, and probably Rs. 20 to Rs. 30 less than the rate we shall have to pay for new rails. The length of the line from Vehar to Tulsi is about 3½ miles and the cost of the rails at Rs. 80 per ton will be : 3½ × 25·2 tons per mile = 88·2 tons × 80 = Rs. 7,056. As this is a favourable opportunity for purchasing the rails and for commencing the work, and as the loan of Rs. 25½ lakhs in which the cost of the work, viz, Rs. 25,000 has been included, and to the raising of which sanction of the Government has been requested, is not likely to be raised for some months, I request the Standing Committee to recommend the Corporation to sanction, pending the raising of the loan, an advance of Rs. 25,000 from available loan and other balances, to be adjusted hereafter against the loan when raised. I also request the sanction of the Standing Committee to the purchase of the rails from Messrs. Walsh, Lovett & Co., at the rate of Rs. 80 per ton, and to the invitation of tenders being dispensed with under the circumstances.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 9314. *Resolved* (by 6 votes *against* 3) : "That, as applied for by the Commissioner in his letter No. 18270, dated 5th instant, the Corporation be recom-

mended to sanction an advance of Rs. 25,000 from available Loan Fund or other balances to meet the cost of constructing road from Vehar to Tulsi, with a light tramway to carry pipes, as provided for in the Loan Works Budget for 1893-94 ; the amount to be adjusted against the loan when raised.

2. "That sanction be given to the purchase from Messrs. Walsh, Lovett & Co. of tram line rails at the rate of Rs. 80 per ton, of the aggregate value of Rs. 7,056 or thereabout.

3. "That under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as the price is low and there is no likelihood of better offers being received."

No. 9315. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 18365, dated 6th instant, and with reference to the Committee's resolution No. 4868, dated 23rd August last, sanction be now given, under section 69 (*e*) of the Municipal Act, to the further variation of the contract with Mr. Sayaji Naguji, whereby the period of the work of filling in the Sankli Tank may be further extended from 15th September 1893 to 10th November last."

No. 9316. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 18757, dated 12th instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,200 from savings in the grant under section I, establishment and labour, Water Works maintenance, to section III, contingencies, to meet excesses on the latter head, due to insufficient Budget provision for the increased liabilities on Tansa works.

"That sanction be also given to the transfer of Rs. 350 from savings in section I, as above, to section III, printing, same head, to meet excess on the latter head on account of additional printing work."

No. 9317. *Resolved* : "That, as applied for by the Commissioner in his letter No. 18594, dated 9th instant, sanction be given to the payment of Rs. 62-14-5 to Shaik Umar, smith-foreman, Municipal Workshops,

being the amount of his full wages from 6th to 31st October last, during which time he was sick in consequence of injuries received while in the execution of his duty."

The consideration of items 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25 and 26 was postponed.

The following return was read and *recorded* :—

No. 9318. Return of fires at Mahim Bazar Road, Babula Tank Road, Delisle Road (the Queen Mill), forwarded with the Commissioner's memorandum No. 18170, dated 4th December 1893.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 10th December 1893.

BOMBAY, 20*th December* 1893.

AT the meeting of the Standing Committee held this day, there were present :

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 13th instant, were signed.

The seal of the Corporation was affixed to the following :—to deed of contract with Mr. Dewram Keshawjee for the construction of a sheep and goat market at DeLisle Road ; to deed of agreement between Mr. Shivajee Dhurmajee and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises No. 199, situate at the corner of Grant and Bapty Roads, without payment of any compensation in respect of the unauthorised work indicated on the plan annexed to the deed, and at the rate of Rs. 28 per square yard, in full satisfaction of his claim under section 301 as the value of the said ground and for any loss, damage or expense sustained by him by reason of such acquisition ; to 275 debentures of the second instalment of two lakhs of the 4½ lakhs loan for Fire Brigade quarters and stations, Nos. 501/2 to 749/50 of Rs. 1,000 each and Nos. 751 to 900 of Rs. 500 each.

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* *See* Appendix **C**. † *See* Appendix **B**.

Resolved : " That, as applied for by the Commissioner in his memorandum No. 19456, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 9431.

Read letter, dated 19th instant, from the President of the Corporation to the Chairman of the Committee, as follows :—

To DR. COWASJI HORMUSJI,

Chairman, Standing Committee.

SIR,—After completing the address to be presented by the Corporation to Mr. Dadabhai Naoroji, the Committee of the Corporation found that no financial provision had been made by the Corporation for the ceremony that will be necessary on the occasion of presenting the address. I have therefore the honor of requesting you to place this deficiency before the Standing Committee at their next meeting, leaving that Committee to make such recommendation as to a grant of funds which they may think appropriate and which may probably meet the approval of the Corporation.—I have, &c., THOMAS BLANEY, President, Municipal Corporation, and Chairman of the Committee for preparing address to Mr. Dadabhai Naoroji.

Resolved : " That, in reply to his letter, dated 19th instant, the President of the Corporation be referred to section 63 (*l*) of the Municipal Act, which requires the previous sanction of Government to Municipal expenditure in aid of public ceremonies or entertainments; and that, in the opinion of the Standing Committee, the ceremony proposed might be most appropriately held in the Municipal Council Hall."

No. 9432.

Read memorandum No. 18892, dated 14th instant, from the Commissioner to the Secretary, as follows :—

Standing Committee's Resolution No. 8913, *dated 6th December* 1893.

Mr. Cursetji's pension papers will be prepared and sent up. The Commissioner is not aware that there are any other papers in the case beyond his various petitions to the Commissioner and the orders of the Commissioner especially referred to in the Resolution of the Standing Committee. The Commissioner regrets that he must decline to furnish these to the Standing Committee as they are not required in order to enable the Standing Committee to deal with the question of Mr. Cursetji's pension, and any general orders which the Commissioner may have issued are not, as he believes, within the powers of the Standing Committee to modify or reverse any more than his orders in this case. There has been much misunderstanding already on this subject, and the Commissioner's immediate object in declining to furnish the papers in question to the Standing Committee is that the whole question may be regularly brought before the Corporation, to which body the Commissioner is

perfectly prepared to furnish a full report on the subject of the orders he has given, and his reasons for giving them, together, of course, with any papers which they may wish to have before them.

The Commissioner is willing to furnish the Standing Committee with any explanation which may be required in order to enable them to deal with this particular case and will anticipate enquiry by saying that Mr. Cursetji is physically and mentally totally unfit, through old age, for further service, and to allow him to continue to draw pay for work he is utterly incapable of discharging would be a clear breach of duty on the Commissioner's part. He is almost decrepit. The Commissioner would perhaps have allowed him to take furlough for the period which has to expire before he can draw the higher pension had the rules permitted of it, but they do not. The rule affecting the case is as follows :—

Art. 377.—An officer in superior service who is subject to the rules of this chapter is eligible after he attains the age of 55 years for privilege leave, for any leave on private affairs to which he may be otherwise entitled and also for leave without allowances under Art. 372, provided that the total leave granted, whether on private affairs or without allowances, does not exceed 6 months in all, and for no other kind of leave.

The necessary leave thus not being admissible to Mr. Cursetji, the Commissioner had not to consider whether he was prepared to grant it or not. On personal grounds he would have been glad to do so, but on the other hand he would have had to take into consideration that Mr. Cursetji has undoubtedly been allowed to remain in the service several years longer than he ought to have done.—H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

" That the following orders issued by the Commissioner with reference to pension cases be printed and brought on for consideration at next meeting."

Withdrawn.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by K. M. Shroff, Esq.—

" That the consideration of the letter from Mr. Cursetji Dhanjibhoy be postponed until the Committee is in possession of all the papers referred to in their Resolution No. 8913 of the 6th instant."

No. 9433.

Carried.

Resolved : " That, as recommended by the Secretary, Hari Suryaji (Havildar) and Ahmed Bapu (peon) in the Standing Committee and Corporation's Office, be allowed to contribute to the Municipal Pension Fund, and that the arrears of their contributions be recovered from their wages in such small monthly in-

No. 9434.

stalments as may be fixed by the Commissioner, and on condition that the usual medical certificates are furnished, and that until all arrears of such contributions are paid, the said Hari Suryaji and Ahmed Bapu shall not be entitled to the benefits of the Pension Fund."

Read the following: memorandum No. 19195, dated 16th instant, from the Commissioner to the Secretary as under:—

The Commissioner has the honour to forward to the Standing Committee copy of a letter received from Messrs. Bulkley & Co. It will be perceived that their tender will, under the circumstances stated, that is, the extension of time, be the lowest.

Under section XXIII of the contract, a fine of Rs. 50 per diem is imposed for delay beyond the contract time, and Messrs. Bulkley & Co. are thus justified in taking each month's extension beyond the period offered by them as being worth Rs. 1,500.

The Commissioner, however, attaches great importance to the speedy completion of so necessary a work, and considers that even if the difference between the two lowest tenders was much greater than it is, it would be outweighed by the undertaking of Messrs. Bulkley & Co. to complete the work in 18 months instead of 24.

The Commissioner trusts, under these circumstances, that the Standing Committee will reconsider their rejection of his recommendation of Messrs. Bulkley & Co.'s tender. The only alternative, *viz.*, the departmental construction of the works, will give great trouble and occupy the time of the Special Drainage Engineer to an undesirable extent.—H. A. ACWORTH, Commissioner.

No. $\frac{67}{75}$

BOMBAY, *December 13th*, 1893.

To THE MUNICIPAL COMMISSIONER, Bombay.

SIR,—With reference to the contract for the Umerkhari Sewerage, we have the honor to mention to you that we prepared our tender under the impression that time of completion was an important consideration. That each month saved represented an equivalent to Rs. 1,500, which is the amount of fine imposed for delay—an amount which we take to represent not only the cost of establishment retained by the Municipality for supervising the contract, but also the interest lost on the capital expended, for this interest must clearly be regarded as lost until the works on which it is expended are completed and available for use.

Regarded in this light, we think it probable that our tender may be found to be the lowest.

If however (as would appear from a report in the "Times of India" of the 14th ultimo) it is regarded as of but slight importance whether these works are completed in the time tendered by us or at a date six months later, we wish to say that, if we are

allowed this additional period of six months, we are prepared to repay to you a sum equivalent to the "Fine" in question, which sum will amount to Rs. 9,000, and may be deducted from our final bill for the works.—We have, &c., BULKLEY & Co.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Kaikhosro N. Kabraji, Esq.—

"That, with reference to his letter No. 19195, dated 16th instant, the Commissioner be requested to call for fresh tenders for the construction of the Umarkhadi sewerage."

Lost, the votes being 4 *for* and 6 *against*.

No. 9435. *Resolved* : "That, as applied for by the Commissioner in his letter No. 19025, dated 14th instant, sanction be given to the purchase from Messrs. Walsh, Lovett & Co., of short length iron pipes for the Water Works Department at 25 per cent. below their contract rates for the supply of iron pipes, valves and fittings."

No. 9436. *Resolved* : "That, as applied for by the Commissioner in his letter No. 18704, dated 11th instant, sanction be given, under section 69 (*c*) of the Municipal Act, to the variation of the contract with Messrs. Vishnoo Narasingrao & Co., whereby the period for the construction of the storm-water drain in Hornby Road shall be extended from 24th November 1892 to 31st March 1893. The establishment charges for the extended period to be paid by the Contractors."

No. 9437. *Resolved* : "That, as applied for by the Commissioner in his letter No. 19094, dated 15th instant, and subject to the sanction of the Corporation to the extra grant of Rs. 4,725 for coal for the Love Grove Pumping Station, sanction be given to the purchase of 300 tons of Bengal sanctoria coal from Messrs. Brook & Co., at Rs. 15-12-0 per ton delivered at Love Grove.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary as similar arrangements sanctioned by the Committee's Resolutions No. 9755, dated 7th January 1891, and Nos. 921, 1453, 4271, 9917, 12866 of 1892-93 and Nos. 4030 and 5530 of 26th July and 13th September 1893, have been advantageous to the Municipality."

Resolved : "That, with reference to the petition from the Chairman and Agents, Piru Mahomed Mill Co., asking for concessions in the matter of the construction of road along the Tulsi main line from Haines Road to the Mill premises, the Standing Committee beg to report that, having perused the voluminous papers for the case, they concur with the Commissioner and the Executive Engineer in the opinion that the Mill Company has no claim to any variation of the terms laid down by the Corporation in their Resolution No. 4595 of 14th August 1890, and that the Company should be required to complete the work required accordingly."

No. 9438.

Resolved : "That, as applied for by the Commissioner in his letter No. 19098, dated 15th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with the Garlick Indian Patent Stone Company, whereby the period for covering with Indian patent stone the floor of the distributing basin of the Bhandarwada Reservoir, of plastering brick piers and of filleting the junction of main walls and piers with the floor shall be extended to 31st October 1893. That sanction be given to the payment of the final bill without requiring the contractors to further reduce the leakage to the limit prescribed in the contract specification."

No. 9439.

Resolved : "That the following be *recorded* :—Letter No. 18833, dated 13th instant, from the Commissioner, reporting, as required by section 69 (*d*) of the Municipal Act, that he has sanctioned the purchase of one dozen tins of hose cement from Messrs. S. E. Norris & Co., of High Street, Deptford, at a cost of Rs. 507-12-3 for the use of the Fire Brigade. The cost to be debited to the grant for stores and stationery, Fire Brigade Budget."

No. 9440.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 19052, dated 15th instant, sanction be given to the transfer of Rs. 200 from the grant under section 5, Markets and Slaughter Houses (lighting other markets), to section 9, contingencies, &c., to meet cost of Auctioneer's charges."

No. 9441.

Resolved : "That memorandum No. 18822, dated 13th instant, from the Commissioner, reporting that no houses or portions of houses fell during the month of October 1893, be *recorded*."

No. 9442.

Considered again the following :—

BOMBAY, 28*th November* 1893.

No. 17646 OF 1893-94.

TO THE MUNICIPAL SECRETARY.

SIR,—With reference to the Resolution of the Corporation No. 4790, dated 21st August 1890, I have the honor to give below, for the information of the Corporation, the areas and prices paid for the plots of land purchased for the extension and improvement of the Victoria Gardens, *viz.* :—

				Rs.	a.	p.
1.	14363 square yards	from Bai Ratanbai		59,096	13	5
2.	27871 do.	from Mr. Merwanji H. Dubash ...		86,026	6	2
3.	18745 do.	from the Bhattia Mill Co.		53.492	3	10
4.	13732 do.	from the Royal Flour Mill Co. ...		36,461	2	9
5.	11277 do.	from the Blue Mill Co.		78,169	13	9
6.	30401 do.	from Mr. Damodar Tapidas		2,08,070	6	0
7.	522 do.	from Sir Dinsha M. Petit, Bart. ...		1,730	13	10
8.	1184 do.	from Mr. Haji Juma and others ...		10,704	1	7
9.	7459 do.	from Mr. Vasta Kalianji and others ...		28,241	11	10

This sum includes Rs. 1,950-8-8 on account of interest at 6 per cent. from 20th December 1892 to 31st March 1894, by which date it is expected that the reference to the High Court regarding the share of the different claimants will be disposed of.

The total of the sums given above, plus Rs. 7,334-2-1 on account of other petty charges, &c., incidental to the purchase, is Rs. 5,69,327-11-3.

Out of this sum Rs. 1,22,205-9-4, being the cost of 24133·16 square yards occupied by the Connaught and Sussex Road, and the road to the west of the Health Department stables, and Rs. 1,72,835-13-2, being the cost of the area, 31536·80 square yards, of the frontages available for sale on the Connaught and Sussex Roads, have been adjusted against the 15 lakhs loan for roads in Agripada and elsewhere as shown below, in accordance with the Resolutions of the Corporation Nos. 4790 of 21st August 1890 and 13958 of 10th March 1892 :—

	Connaught and Sussex Roads. Square yards.		Road to the west of the Health Department Stables.	Rs.	a.	p.
Bai Ratanbai...	.....		1275	5,246	0	2
Mr. Dubash	4952·27		.....	15,285	10	2
Bhattia Mills	4440		.....	12,670	5	6
Blue Mill	4755		.....	32,960	10	11
Mr. Damodar Tapidas	5780·56		.....	39,563	4	6
„ Haji Juma and others... ...	637		.....	5,758	14	1
„ Vasta Kalianji and others ...	2293·33		.....	8,683	1	8
	22858·16 = 24133·16	+	1275	1,20,167	15	0
			other petty charges	2,037	10	4
			(A)	1,22,205	9	4

	Frontage land. Square yards.	Rs.	a.	p.	
Bai Ratanbai	3023	12,438	3	1	
Mr. Dubash	2498·19	7,710	14	3	
Bhattia Mills	4259·21	12,154	6	9	
Blue Mill	6470	44,848	11	6	
Mr. Damodar Tapidas	11004·03	75,313	11	8	
Mr. Haji Juma and others ...	547	4,945	3	6	
Sir Dinsha M. Petit, Bart. ...	522	1,730	13	10	
Mr. Vasta Kalianji and others.	5213·37	12,166	10	7	
	31536·80	1,71,308	11	2	
		1,527	2	0	other petty charges.
		1,72,835	13	2	(B)

The total of the two items marked A & B is Rs. 2,95,041-6-6. Rs. 44,437-1-5, being the cost of 9,990 square yards reserved for the Health Department stables out of the land purchased from Bai Ratanbai, have been also debited to the provision of Rs. 1½ lakhs for the construction of bullock stables and quarters for scavengers as sanctioned in the Corporation Resolution No. 4790 of 21st August 1890. Rs. 3,881-3-9, being the cost of 596·33 square yards required for the improvement of the Parel and Ghorupdeo Roads, have been paid out of the ordinary improvement grant as detailed below :—

	Square yards.	Rs.	a.	p.
Bai Ratanbai	75	308	9	5
Mr. Damodar Tapidas	469·33	3,212	3	0
Blue Mill	52	360	7	4
	596·33	3,881	3	9

After deducting the total of the adjustments above referred to, *viz.*, Rs. 3,43,359-11-8 from the total cost of Rs. 5,69,327-11-3, there remains a balance of Rs. 2,25,967-15-7 still to be adjusted, which I suggest should be debited to the Rs. 2½ lakhs reserved from current revenue for such adjustment as pointed out at page 75 of the Annual Report for 1892-93.

This sum represents the cost of the land actually added to the Victoria Gardens as detailed below :—

	Square yards.	Rs.	a.	p.	
Mr. Dubash	20420·54	63,029	13	9	
Bhattia Mills	10045·79	28,667	7	7	
Royal Flour Mill	13732	36,461	2	9	
Mr. Damodar	13147·08	89,981	2	10	
Mr. Vasta Kalianji	1952·30	7,391	15	7	
	59297·71	2,25,531	10	6	
		436	5	1	other petty charges.
		2,25,967	15	7	

But out of this sum must be deducted Rs. 4,075, the cost of the chawl which stood on the land purchased from the Royal Flour Mill Company, and debited to the provision for quarters for the

garden staff as sanctioned in the Resolution quoted above. This reduces the cost of the area added to the gardens to Rs. 2,21,892-15-7, which will have to be increased on account of interest if the reference made to the High Court in the matter of land acquired from Mr. Vasta Kalianji and others is not disposed of by the High Court before 31st March 1894.

I do not consider it desirable to raise a loan to provide for the cost of the extension of the gardens, when we have already a reserve fund of Rs. 2½ lakhs for the purpose, and I therefore request the Standing Committee to recommend the Corporation to accord their sanction to the adjustment of this sum against the Rs. 2½ lakhs reserved for the improvement of the gardens.—I have, &c.,

H. A. ACWORTH, Commissioner.

Resolved: "That letter No. 17646, dated 28th ultimo, from the Commissioner, be forwarded to the Corporation, with a recommendation that sanction be given to the net cost of the land added to the Victoria Gardens, Rs. 2,25,967-15-7, with interest and other charges, being adjusted against the Rs. 2½ lakhs reserved for that purpose."

No. 9443.

Considered again the following:—

No. 17182 OF 1893-94.

Bombay, 22nd November 1893.

TO THE MUNICIPAL SECRETARY.

SIR,—With reference to Corporation's Resolution No. 204 of 6th April last, I have the honour to forward copy of a very full and complete report from the Executive Engineer. (2) Mr. Murzban's proposals involve the establishment of an arc and an incandescent installation at the Arthur Crawford Markets, the former to be composed of 20 lamps of 2,000 candle-power each, with a capacity of extension to 24, and the latter of 16 fifty candle-power lamps, capable of being extended to 22. Two new dynamos will be required, of which one (that for the arc lamps) can be driven by the engine provided for the installation at the Municipal Offices, and for the other a small vertical 3 horse-power engine will be required, which it is proposed to place in a lean-to shed attached to the existing structure. (3) The amount of Messrs. Fleming & Co.'s tender, which, for reasons given, Mr. Murzban proposes to accept, is £1,144-15-0, or at 1s. 3d. the rupee, Rs. 18,316. Adding 5 per cent. for contingencies, the amount to be provided is Rs. 19,232, and Rs. 20,000 might be sanctioned if the proposal is accepted. (4) The working expenses will be Rs. 700 a month, to which Mr. Murzban adds Rs. 105 as a sinking fund, making a total of Rs. 805 per mensem. The present cost of lighting the markets with gas is Rs. 668. The Municipal Offices

are practically not lighted at all, candles being used after dark, which are neither safe nor effective. Mr. Murzban estimates that the cost of lighting the Municipal Offices with Kerosine oil will be Rs. 160 per mensem. With regard to this, I wrote in my No. 27367 of 16th March 1893: "I have received from the "Executive Engineer two estimates, one for lighting the Office "rooms and the other for lighting the corridors and staircases of "the new offices with Kerosine oil. For the offices an initial "expenditure of Rs. 992 is reported to be required for the "purchase of lamps and Rs. 2,063 for the corridors and staircases. "A monthly expenditure of Rs. 176 and Rs. 138 for the two "purposes has also been estimated for. For the clerks and "surveyors, a very cheap lamp costing only Rs. 3 has been proposed, "and for the superior officers as well as for the corridors, &c., a "lamp costing Rs. 15. The monthly expenditure has been calcu-"lated on an average basis of two hours' lighting daily throughout "the year. The Executive Engineer, however, thinks that in "practice, a smaller expenditure than Rs. 176 + 138 = 314 per "mensem will meet requirements, and prefers to take a round sum "of Rs. 160. I do not myself think that less than Rs. 200 per "mensem will suffice." The present proposal compares therefore favourably on the ground of economy with existing and other proposed arrangements, while on other grounds it is of course superior to them, the present lighting of the markets being very bad. The capital sum, if sanctioned, might be met out of Surplus Cash Balance.

Amount reserved in the budget for 1894-95 for probable extra grants up to the end of 1893-94 ...		Rs.	1,35,079-0-0
Deduct—Amount of grants already sanctioned excluding temporary advances to be adjusted hereafter...	Rs. 20,556-0-0		
Expenditure recommended for sanction	„ 57,017-5-5		
		„	77,573-5-5
		Available Rs.	57,505-10-7

I have, &c., H. A. ACWORTH,
Municipal Commissioner for the City of Bombay.

No 10728 OF 1893-94.

BOMBAY, *4th November* 1893.

To THE MUNICIPAL COMISSIONER.

SIR,—I have the honour to submit five tenders for providing and erecting additional electric light plant for lighting the Arthur Crawford Markets and the Municipal Offices. These are from I.—The Laing, Wharton & Down Construction Syndicate (Limited); II.—Messrs Siemens Brothers & Co.; III.—Mr. A. A. Crawford, Electrician; IV.—Mr. J. B. Foster, Electrician, care of Messrs.

Greaves, Cotton & Co.; V.—Messrs. John Fleming & Co. After the receipt of these five tenders, Mr. Crawford and Mr. Foster have submitted certain revised tenders, which are also herewith sent. (2) The Laing, Wharton & Down Construction Syndicate offer to do the work for the sum of £1,175. This estimate does not include any charges for cutting away masonry, &c., for the purpose of running the wires in the Market buildings nor for any spare parts of the machinery. They propose to run the incandescent lamps for the Market Clock from the dynamo put down for lighting the Municipal Offices. This would necessitate running the dynamo all night, which, with such a large machine, would cause a great waste of power and also a larger consumption of coal. I cannot therefore recommend this tender for acceptance. (3) Messrs. Siemens Brothers & Co. offer to supply the extra lighting apparatus, including an engine for driving the dynamo, free on board in London for the sum of £940. As this firm does not wish to undertake the erection of the plant, it is not necessary to consider this tender also. (4) Mr. Crawford's original tender amounts to £1,182½ for the whole plant erected complete. The specification is good as far as the makers of the dynamo lamps and cable are concerned, but the principal objection to his proposal is that the cables are proposed to be run overhead across the road from the lighting station at the workshops to the markets. As there is a Government telegraph wire running along Paltan Road, and as the Government rules prohibit the running of electric light cables within 10 feet of their wires, it would necessitate putting the cable at such a height as to be dangerous and unsightly. Overhead wires are not allowed in England I believe, and they would not, I think, be permitted in Bombay. Under these circumstances I cannot recommend the acceptance of this tender also. (5) Mr. Foster's original tender is £1,154 for the whole plant erected complete. His specification is more complete than any of those referred to in the preceding paras. The materials are all by good makers and the work as specified by him would be of good quality. The guaranteed insulation of the cables is very high, and everything points to a really first class work. This tender, however, does not include any spare parts of the machinery. (6) Messrs. John Fleming & Company's tender amounts to £ 1,150. This firm also gives a very complete specification for the execution of the work, with the best materials and workmanship. Everything, with the exception of the lamps, is to be provided by the well-known firm of Silvertown and Co. (7) Both Messrs. John Fleming and Co. and Mr. Foster propose a similar method of lighting, *viz.*, two separate circuits, one for the arc lighting and the other for the incandescent lighting for the Clock Tower, the circuits to be run on different pairs of cables. Messrs. John Fleming's arc lighting installation is to consist of an S. H. 18 Silvertown dynamo running at 800 revolutions per minute and 20 arc lamps each 2,000 candle-power of the well-known Brockie Pell type. The incandescent installation

is to consist of a Silvertown S. H. 2 dynamo running at 110 volts 1,200 revolutions per minute. The dynamo will be capable of lighting six more lamps if required. They propose also to provide a vertical steam-engine to work the incandescent dynamo. (8) Mr. Foster's arc lighting installation is to consist of Messrs. J. G. Statter and Co.'s dynamo running at 950 revolutions per minute and 22 arc lamps each 2,000 candle-power of the Brockie Pell type. The incandescent installation is to consist of a dynamo made by Messrs. Elwell, Parker and Co. running at 100 volts 1,100 revolutions per minute or less. They also propose to provide a vertical high speed engine to work the incandescent dynamo. (9) It will be seen that both the above tenderers offer to do the work on almost similar terms and conditions, but Messrs. John Fleming and Co.'s tender has one advantage as compared with the other, namely, they offer to provide several spare parts of machinery, the value of which is estimated at £150. These spare parts, as observed by Messrs. John Fleming and Co., are necessary for the successful working of the plant. They consist of 10 spare arc lamps, besides other articles. But so many extra lamps are not, I think, necessary. If only five were provided the amount would be reduced to £1,110. (10) I will now refer to the revised tenders submitted by Mr. Crawford and Mr. Foster. Mr. Crawford has reduced the amount of his tender from £1,182½ to £1,011½, a difference of £171. This saving has been effected by reducing the length of the cable from the present engine house by locating the auxiliary engine and incandescent lighting dynamo in the vicinity of the Clock Tower. This will involve some extra cost for attendance and supervision and for the erection of a new engine house. Taking this into consideration and bearing in mind that Mr. Crawford's tender, original as well as revised, does not include the provision of any spare parts, Messrs. John Fleming and Co.'s tender of £1,150, though apparently in excess of Mr. Crawford's revised tender, is the more favourable of the two. (11) The amount of Mr. Foster's revised tender is £1,110 less 12½ per cent., or £962-10. Adding to this £54 for the engine for the incandescent lighting plant, it makes a total of £1,016-10, which is less than his original amount of £1,110 by £83-10, and also that of Messrs. John Fleming & Co.'s amount of £1,110 by £93-10. Following Messrs. John Fleming & Co.'s example, Mr. Foster now offers to supply certain spare parts of the machinery, but he provides for only one spare lamp instead of five, calculated in Messrs. John Fleming & Co.'s estimate. The value of four spare lamps would be £32 and that of a set of lineman's tools, a galvanometer, and speed indicator, included in Messrs. John Fleming & Co.'s tender, but not in that of Mr. Foster, is about £10. The value of these reduces the difference of £93-10-0 referred to above to £51-10-0. (12) The dynamos proposed by Messrs. John Fleming & Co. and by Mr. Foster, though by different makers, are both superior machines, but Messrs. John Fleming's dynamo made

by the Silvertown Co. has the additional advantage of having a third bearing on the outside of the driving pulley, thereby giving a steadier running machine and avoiding undue wear and tear. The value of this extra bearing is about £15, which still further reduces the balance of £51-10 above referred to, to £36-10. (13) On the whole Messrs. John Fleming & Co.'s original tender exceeds Mr. Foster's revised tender by £36-10. But this apparent saving is more than counterbalanced by the facts that (*a*) Messrs. John Fleming & Co.'s dynamo runs at a slower speed than that proposed to be provided by Mr. Foster; that (*b*) while the former provides for an armoured cable, *i.e.*, a cable which is covered with a band of galvanized steel, the other provides for an insulated cable laid in galvanized iron pipes, which are more likely to corrode than the galvanized steel sheet; and that (*c*) Messrs. John Fleming & Co. offer to erect the lean-to shed required for the incandescent lighting plant without any extra charge. (14) Considering everything, it appears to me that Messrs. John Fleming & Co.'s tender is the most favorable, and I beg therefore to recommend its acceptance. Its amount is £1,110, or Rs. 17,760, if the exchange were at 1*s.* 3*d.* a rupee. (15) To the above amount of Rs. 17,760 a sum of Rs. 556 should be added for altering the present system of driving the dynamo for lighting the Municipal Offices. As the proposed arc lighting dynamo and the present alternating dynamo and its excitor will have to be driven from the same countershaft, it will be necessary to make some arrangement for throwing the alternator and excitor out of gear when the lights are not required in the Municipal Offices. The Superintendent of Municipal Workshops estimates the cost of the alteration at Rs. 800, but Messrs. John Fleming & Co. offer to do it for £34-15-0, or, say, Rs. 556. The initial cost of the whole work would therefore be Rs. 18,316, to which must be added 5 per cent. for contingencies, in all Rs. 19,232, or, in round figures, Rs. 20,000. (16) In my original estimate I had assumed the cost of coal at Rs. 285 per month. This was calculated at 10 cwts. per day at 4 lbs. per horse-power per hour on an average indicated horse-power of 37 during the 7½ hours that the engine would have to run. But the installation having since been worked for a few days to test its efficiency, it is found that the cost of coal would exceed the above amount. This is on account of the lighting of the Municipal Offices requiring more power than was anticipated and also owing to the fact that with the lighting of the offices alone, the engine is not loaded to its most economical point. (17) If an additional load were placed on the engine, as is proposed to be done by lighting the Crawford Markets along with the Municipal Offices, it would be possible to work the installation at an expenditure of about 15 cwts. of coal per day. At this rate the quantity required per month would be about 22·50 tons. (18) The total cost of running the whole plant will be about Rs. 700 per month as detailed below:—22½ tons coal at Rs. 18 per ton,

Rs. 405 ; oil, waste, packing, &c., Rs. 50; repairs and renewals, Rs. 50; 1 driver at Rs. 45 per month, Rs. 45; 1 fireman at Rs. 18 per month, Rs. 18; 1 assistant fireman at Rs. 15 per month, Rs. 15; 1 coalman, Rs. 10; 1 electric light attendant at Rs. 40 per month, Rs. 40; 1 electric light assistant at Rs. 20 per month, Rs. 20; 2 coolies at Rs. 10 per month, Rs. 20; allowance to the workshop foreman, 25; total, Rs. 698, or, say, Rs. 700. (19) It will be observed that a sum of Rs. 100 was provided in the estimate submitted with my first report for an electrician. It is not now considered necessary to engage a full-time man for this work. The Head Foreman in the Municipal Workshops who understands electric lighting and resides in the Workshops compound, will be able to look after the working of the machinery, and an allowance of Rs. 25 is proposed to be made to him. The driver, fireman, coalman, and one electric light attendant would be required to be on duty all night, whilst the assistant fireman will be on the work during the day for cleaning the machinery and getting up steam. The electric light assistant and two coolies will also attend during the day to clean and trim the lamps. (20) It is assumed that the plant will last for about 20 years. A sum of Rs. 104·24, or Rs. 105 nearly per month, will be required to recoup in that period at 4 per cent. per annum compound interest the initial cost of the new plant, *viz.*, Rs. 20,000 minus Rs. 3,000, the probable cost of the kerosine oil lamps, which will have to be supplied to the Municipal Offices if the building were not lighted with electricity. This gives Rs. 805 as the total monthly cost of lighting with electricity both the Crawford Markets and the Municipal Offices. (21) The present average monthly cost of lighting the Crawford Markets is Rs. 618, which is based on the actuals of the last five years. To this must be added about Rs. 50 for lighting the new mutton markets now under construction, thus giving a total of Rs. 668. (22) If, therefore, the proposal to light the Crawford Markets and the Municipal Offices with electricity were carried out, there will be a monthly excess of about Rs. 137 over the actual expenditure now incurred in lighting the Markets alone. But there would be a monthly saving of Rs. 160, which amount would be required for lighting the Municipal Offices with kerosine oil if the building were not lighted with electricity. (23) On the whole, therefore, not only a net monthly saving of Rs. 23 will be effected, but the Markets will be better lighted and the main entrance to them and the yard inside, which are not lighted at all now, will also be lighted with electricity. The risk also of accidents by fire to the Municipal buildings will be minimized and better lighting and greater cleanliness would be the result. Above all, the costly plant and fittings already put up will be utilized and not deteriorated by disuse. (24) I beg now to recommend (*a*) that the sanction of the Corporation be obtained to an initial expenditure of Rs. 20,000 for providing additional machinery and plant; (*b*) that the work of providing and

fixing the additional plant and machinery be entrusted to Messrs. John Fleming & Co. for a sum of £1,110 at the rate of exchange ruling at the time the tender is accepted ; (*c*) that the work of alteration to the gear of driving the dynamo be also entrusted to Messrs. John Fleming & Co. for a sum not exceeding £34-15-0 ; and (*d*) that the sanction of the Corporation be obtained to the monthly working expenditure of Rs. 700 for lighting both the Crawford Markets and the Municipal Offices with electricity.—I have, &c.,

M. C. MURZBAN,
Executive Engineer.

No. 9444. *Resolved* (with one dissentient) : "That letter No. 17182, dated 22nd ultimo, from the Commissioner, and its accompaniment, be forwarded to the Corporation with a recommendation that they will sanction (1) an initial expenditure of Rs. 20,000 for providing additional machinery and plant for lighting the Municipal Offices and the Arthur Crawford Markets by electricity ; (2) that the work of providing and fixing the additional plant and machinery be entrusted to Messrs. John Fleming & Co. at a cost of £1,110 at the rate of exchange ruling at the time the tender is accepted ; (3) that the work of altering the driving gear of the dynamo be also entrusted to Messrs. Fleming for a sum not exceeding £ 34-15-0 at the rate of exchange ruling ; and (4) that sanction be given to a monthly working expenditure of Rs. 700 *plus* Rs. 105 per mensem for Sinking Fund. The cost of this plant and alterations to be debited to surplus cash balance."

No. 9445. *Resolved* : "That, as applied for by the Commissioner in his letter No. 18049, dated 1st instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Sittaram Luxmon & Co. for the construction of the Tansa pipe line from Ghatkopar to Kalachowki Road, whereby Rs. 32,366-12-5 out of their deposit and 10 per cent. retention money, aggregating Rs. 36,000, may be returned to the contractors, and the balance of Rs. 3,633-3-7 retained by the Municipality to provide for the cost of repairs to the pipes which burst during the maintenance period of the work, as also for cost of repairs to tram lines and minor works chargeable to the contractors."

No. 9446. It was agreed that the consideration of letter No. 18082, dated 2nd instant, from the Commissioner be postponed until the next meeting.

Considered the Progress Reports, up to the end of September 1893, of new works now in course of construction.*

Resolved: "That the Progress Reports up to the end of September 1893 of new works in course of construction be *recorded*."

No. 9447.

Considered again the Health Officer's Report for the third quarter of 1893. †

Read memorandum No. 19126, dated 15th instant, from the Commissioner to the Secretary as under :—

The Health Officer's Report for the third quarter of 1893 is now before the Standing Committee, and I think it right, in connection therewith, to suggest that the Standing Committee should recommend to the Corporation some pecuniary reward to the officers mentioned by Dr. Weir in recognition of their excellent services during the Riots.

I cannot myself act on Dr. Weir's recommendation of them for promotion or advancement except as vacancies occur, and the promotion which may then be granted may probably be such as would have been given in any case. 7 Inspectors on pay ranging from Rs. 150 to Rs. 250 per mensem, 4 Sub-Inspectors on pay from Rs. 20 to Rs. 50, 2 Stable Muccadums on Rs. 15 and Rs. 12 respectively, one Ward Muccadum on Rs. 12, one Cemetery Clerk on Rs. 20, and one Police Ramosi on Rs. 11 are specially mentioned by the Health Officer.

I would suggest that a round sum of Rs. 1,000 might be sanctioned to be distributed among the officers mentioned. The distribution, I think, should be left to my discretion.

I do not refer in this connection to either the Health Officer or his Assistant who from their position would doubtless decline to participate in any pecuniary mark of favor. But I have already drawn the attention of Government to the admirable work done by Dr. Weir and Mr. Leask, as well as some other officers during the Riots, and the thanks of Government have been communicated to them. To this I am able to testify from personal observation, and on the same ground to endorse what Dr. Weir says of most of the officers and men referred to by him.—H. A. ACWORTH, Commissioner.

Resolved : " That the report of the Health Officer for the 3rd quarter of 1893, and memorandum from the Commissioner to the Secretary, No. 19126, of 15th instant, be passed on to the Corporation with the

No. 9448.

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* *See* Appendix D. † *See* Appendix A.

expression of the Standing Committee's opinion that the following officers and servants are deserving of warm commendation for their meritorious services during the Riots, with a view to such action, if any, as may commend itself to the Corporation.

"*Inspectors.*—Glover, Hallums, Desmir, Powell, Ringrow, Dawes and DeSouza.

"*Sub-Inspectors.*—Webb, Harris, Mowforth and Kanoba Bahiroba.

"*Stable Muccadums.*—Tookaram Zillo and Raghoo Babaji.

"*Ward Muccadum.*—Shaik Alli Ismail.

"*Cemetery Clerk.*—Banekhan Manwarkhan."

No. 9449. The consideration of the following was further postponed till next week and it was agreed that the papers in the case be printed and circulated in the meantime:—Memorandum No. 18171, dated 4th instant, from the Commissioner, submitting, with reference to the resolution of the Committee, No. 8149, dated 22nd ultimo, a report from the Executive Engineer, and stating that the order for the removal of the rewas wasgiven by the late Commissioner; adding that it was impossible for any one to foresee either the character of the claim on which the Municipality were defeated or the tergiversation of the witnesses."

No. 9450. *Resolved*: "That the following be circulated and brought on for consideration at a future meeting:—Memorandum No. 18495, dated 8th instant, from the Commissioner to the Secretary, forwarding letter from the Chief Accountant, reporting that he has adjusted the stock accounts of the different departments of the Municipality for the financial year ending 31st March 1893, and requesting sanction of the Standing Committee and the Corporation to the writing off of Rs. 1,04,540-4-0 as loss by auction, &c., sale of unserviceable and other stores as per detailed statements submitted."

No. 9451. *Resolved*: "That, as applied for by the Commissioner in his letter No. 18772, dated 12th instant, sanction be given, under section 91 (1) of the Municipal Act, to an application being made by him to Government for the taking up, under the Land Acquisition Act,

of the plot of the land required for new road from Naigaum Cross Road to Matunga marked "A" and shown in green colour on the tracing marked "A," dated 7th idem and filed in supplement to minute books."

Read the following :—

No. 11234 OF 1893-94.

BOMBAY, 17*th November* 1893.

To THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to report that the cost of making the footpath on the system suggested by Mr. Carroll will be Rs. 15 per 100 sq. ft. as detailed below :—

	Rs.	a.	p.
100 c. ft. excavation, 12″ deep, including removal ...	2	12	0
50 c. ft. rubble stone, 6″ thick	2	12	0
25 c. ft. metal, 3″ thick	1	9	0
25 c. ft. screened gravel, 3″ thick	4	4	8
Cartage for materials	1	2	0
Labour for packing, putting metal, rolling, watering, &c.	2	0	8
Total Rs. ...	14	15	8

or say Rs. 15

2. It will be observed from the above details that the footpath will be 12″ thick and include 6″ of rubble packing, 3″ of metal and 3″ of screened gravel.

3. The footpath constructed on the system above stated has the drawbacks of

(*a*) Being costly at first and in maintenance,

(*b*) Defective, as it would not after some time allow the surface water to pass through it.

4. A footpath consisting of a layer of murum, 4″ thick, covered by a layer of coarse sand ½″ thick is, I think, quite good enough for our present purposes. It is constructed at a small cost and cheaply maintained. I would ask Mr. Carroll to inspect the Khote footpath which I have had lately repaired. I think it is a good specimen of a cheap footpath. It will of course have to be remade every year after the rains. I shall, however, be glad to have a small piece made according to Mr. Carroll's specification and see how it answers.—I have, &c., M. C. MARZBAN.

No. 17073 OF 1893-94.

28*th November* 1893.

Copy forwarded to the Standing Committee. If so desired by that body, the Commissioner will ask the Executive Engineer to carry out the proposal made in his concluding sentence, presuming him to know what the specification referred to is.—H. A. ACWORTH, Commissioner.

Resolved: "That the following be forwarded to the Corporation, with reference to their resolution No. 5497, dated 11th September last :—Memorandum No. 17073, dated 20th November 1893, from the Commissioner, reporting on the subject of the construction of unpaved footpaths on a better specification."

No. 9452.

Resolved : "That, with reference to memorandum No. 16390, dated 11th ultimo, and the resolution of the Committee No. 4646, dated 16th August 1893, sanction be now given, under section 123 of the Municipal Act, to the following rules framed by the Commissioner for keeping store accounts in the different departments of the Municipality, in order that the value of tools and plants which hitherto appeared in the accounts may be written off and the necessary adjustments made."*

No. 9453.

Considered the following :—

BOMBAY, 25*th August* 1893.

TO THE PRESIDENT,
Municipal Corporation.

SIR,—We, the undersigned, beg to bring to your ever kind notice that we are residing at Currey Road or DeLisle Road and at present we are put to great inconvenience and trouble in procuring our daily bazaar supplies from distant markets.

Under the circumstances we would most respectfully request your honour to consider the advisability of permitting a private market in our locality, which is much needed and would facilitate matters and add to our comfort. In doing this you would be conferring a great boon on the residents of this locality, and for which we shall feel extremely thankful. We understand that Mr. Hajee Oosman Dawood is preparing to build a private market at Currey Road ; if so, a private market on his land would satisfy the locality.—We are, &c., S. S. BATLIWALLA, L. M. & S., and others.

Read letter No. 17291, dated 22nd ultimo, to the Secretary :—

SIR,—With reference to the Standing Committee's Resolution No. 5021 of 30th August last, forwarding petition from the residents of DeLisle and Currey Roads, requesting that a private market may be allowed to be built in the locality, I have the honour to state that the Superintendent of Markets is of opinion that a market is much needed in this locality and would be a great convenience both to the Europeans and Natives residing in the neighbourhood. I agree with the Superintendent of Markets and

* See Proceedings of the Standing Committee, dated 2nd August 1893.

have therefore directed him to select a site in the neighbourhood for a Municipal Market. This seems preferable to permitting the erection of another private market. As soon as a site is selected, plans and estimates for the erection of a market will be submitted for sanction.

I think therefore that the petitioners should be informed (but as to this I am in the hands of the Corporation) that the Corporation are unable to sanction a private market at Currey Road, but that steps are being taken to provide a Municipal Market in the locality.

I would suggest that the Corporation take into their consideration the general question of what parts of the city new private markets are to be allowed in, as section 402 of the Municipal Act clearly contemplates general instructions on the subject from the Corporation, subject to which the Commissioner is to give his orders in specific cases.—I have, &c., H. A. ACWORTH, Commissioner.

No. 9454. *Resolved*: "That letter No. 17291, dated 22nd ultimo, from the Commissioner, be forwarded to the Corporation, with reference to petition from residents of DeLisle and Currey Roads, requesting that a private market may be allowed to be built in that locality. That the applicants be informed accordingly."

No. 9455. It was agreed that the consideration of petition from Mr. Dosa Jiwan, complaining that he is not allowed to project a gallery from his building in Lohar Chawl Street, be postponed until the next meeting.

No. 9456. *Resolved*: "That the following be laid on the table :—Letter, dated 8th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements, at the end of each week, for the month of November last, and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statements of their scrutiny of the accounts."

No. 9457. *Resolved*: "That the following be *recorded* :—Memorandum No. 19055, dated 15th instant, from the Commissioner, forwarding analyses of water as under :—

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir, on the 28th November 1893.

Parts per million.

Free Ammonia	·04
Albuminoid Ammonia	·15

Sample of partly filtered Tulsi water taken from the distributing tank, Malabar Hill Reservoir, on the 28th November 1893.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·08

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 29th November 1893.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·10

Sample of filtered Vehar water obtained from the Vehar filters on the 29th November 1893.

	Parts per million.
Free Ammonia	Trace
Albuminoid Ammonia	·09

Sample of Tansa water drawn from a hydrant on 27" main, in Arthur Road, on the 4th December 1893.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·07

It was agreed that letters Nos. 10856, dated 25th August, and 19302, dated 18th December 1893, from the Commissioner, be circulated and brought on for consideration at a future meeting.

The following return was read and *recorded* :—

No. 9459. Return of fires at Carpenter Street (Mazagon), DeLisle Road (Hope Mill) and Dadur Road, forwarded with the Commissioner's memorandum No. 18895, dated 14th December 1893.*

The following statement † was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 17th December 1893.

Resolved : "That the following be *recorded* :—

No. 9460. Letter to the Secretary No. 19384, dated 19th instant, from the Commissioner, reporting that he has sold to Jadu Rama Kharwar for Rs. 180 the right to cut grass from the Municipal land (820 sq. yds.) near the condensing reservoir at the Love Grove Pumping Station and from the compound (33,333 square yards) of Mr. Varjiwandas Madhowdas' bungalow thereat for year from 1st January 1894."‡

Resolved : "That, as applied for by the Commissioner in

No. 9461. his memorandum No. 19342, dated 19th instant, sanction be given to the transfer of Rs. 100, from savings in section III, B, Elphinstone Circle garden, to section III, same head, for cost of painting railings."

* *See* Appendix C. † *See* Appendix B.

‡ Last year the right was sold for Rs. 74.

Resolved : "That, as applied for by the Commissioner in his letter No. 19495, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Framji Sorabji and Co., the lowest of the three tenders received for the construction of strainers at Ghatkoper siphon head, at a cost of Rs. 8,647-12-0 *plus* Rs. 864-4-0 for 10 per cent. contingencies : total Rs. 9,512 against the Engineer's estimate of Rs. 10,500." No. 9462.

BOMBAY, 27*th December* 1893.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSHRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the HEALTH OFFICER.

The signing of the minutes of the Meeting, held on the 20th instant, was postponed.

The items in respect of the list of water-supply disconnections was struck out of the list as no such list was presented.

Resolved : "That, as applied for by the Commissioner, in his letter No. 19838, dated 23rd instant, the Corporation be recommended to sanction the expenditure of Rs. 975 from savings in the sanctioned revised estimates for the new works at Love Grove to meet the cost of an electric light installation at the new engine-house." No. 9643.

Resolved : That, as applied for by the Commissioner, in his letter No. 19671, dated 22nd instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 3,000 from savings in the establishment grant for small-pox and cholera hospitals to the grant for infectious diseases, special measures, to meet excess on the latter head, due to extra expenditure which had to be incurred on account of the unhealthy condition of the City during the months of May and June last." No. 9644.

Resolved : "That, as applied for by the Commissioner in his letter No. 19552, dated 21st instant, sanction be given to the continuance, up to 31st October last, of the temporary appointments of two drafts- No. 9645

men on Rs. 30 each per mensem (sanctioned in the Committee's Resolutions Nos. 2198 and 5159, dated 7th June and 6th September last). The amount to be met from savings in the grant for establishment, Water Works Department."

Considered letter No. 19690, dated 22nd instant, from the Commissioner to the Secretary as under :—

SIR,—I have had some correspondence with a Mr. Cavanagh, a dealer in Australian horses, as to the tax to be paid by him on the horses in his temporary stables. If strictly assessed according to the schedule to the Act he would have to pay Rs. 537, and if compounded with, as is done in the case of commission stables, he would pay Rs. 60 or 70. I do not think, however, that he has any claim to be treated as the latter stables are, inasmuch as in their case the stables are occupied annually and any deficiency in one year is made up by an excess in another. At the same time the tax of Rs. 537 is very heavy, having regard to the fact that the horses hardly use the roads while in Mr. Cavanagh's possession. I recommend, having regard to all the circumstances, a composition at the rate of 50 per cent. of the full tax. I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner, in his letter No. 19690, dated 22nd instant, the Standing Committee hereby approve, under the terms of section 185 of the Municipal Act, of his compounding with Mr. Cavanagh, dealer in Australian horses, for the payment of the tax in respect of the horses kept by him temporarily for sale, at the rate of 50 per cent. only of the full tax."

No. 9646.

Considered letter No. 19400, dated 19th instant, from the Commissioner to the Secretary as under :—

SIR,—I have the honor to say that in the year 1884 a simple refuse incinerator, devised by Mr. Hallums, of the Health Department, was erected at Sewri, near the Christian cemetery, where some 30 carts of refuse daily were burnt until 1892, when, owing to the establishment of the Government Glanders Hospital on the ground, it was necessary to remove it. The Health Officer has now recommended the erection of what is called the "Silchar" incinerator, a contrivance used for the cineration of night-soil at Silchar in Assam, and which has been very favorably reported on. The proposal is for an incinerator only 4 feet square with a corrugated iron roof and a flight of steps, up which the refuse will be carried to be thrown into the furnace. The cost, exclusive of land and including royalty, will only be Rs. 1,047 and the Health Officer expects the incinerator to burn more than the 30 carts formerly disposed of. The Health Officer has selected a spot

for its erection on the right hand of the old Sewri Road and not far from the cemetery, which the Collector of Bombay says can be let on a tenancy at will at 9 pies per square yard per annum. The ground occupied will be 484 square yards and the rent therefore Rs. 22-11-0 per annum. The Collector says the ground cannot be occupied permanently in this way, but as this proposal is rather in the nature of a cheap experiment I recommend the acceptance of his terms. The amount required for construction can be met out of savings in the earth grant for covering cutchra deposits and the rent can be charged to the contingencies of the Health Department.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 19400, dated 19th instant, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given (1) to the erection of a "Silchar" incinerator on Government ground, on the right hand side of old Sewri Road, at a cost of Rs. 1,047 (including Royalty) to the debit of savings on the grant for earth for covering cutchra deposits, and (2) to the leasing on a monthly tenancy* from Government 484 square yards or thereabout of ground thereat for the construction of the incinerator at a rental of 9 pies per square yard per annum (Rs. 22-11-0) yearly to the debit of savings in the contingent grant, Health Department Budget."

No. 9647.

Considered letter No. 19806, dated 23rd instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to state that Messrs. Garlick and Co.'s period of working their incinerator has expired and, pending the decision of the Corporation on the reports on it from the Executive Engineer and Health Officer, the former of which was received on 20th instant and the latter on 21st, we are unable to use it further. I have therefore authorized the Health Officer to employ 20 extra carts for the removal of refuse at a monthly cost of Rs. 697-8-0, to be met out of savings in 2, labour, scavengering, feed of bullocks, in anticipation of sanction from the Standing Committee and Corporation, which I request may be accorded.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved: "That letter No. 19806, dated 23rd instant, from the Commissioner, be forwarded to the Corporation with a recommendation that sanction be given to the monthly expenditure of Rs. 697-8-0, to the debit of savings in the grant for 2, labour, scavengering, feed of bullocks, Health Department Budget, to meet the

No. 9648.

* The words "monthly tenancy" were inserted on the suggestion of Mr. Roughton in place of the words "tenancy at will".

cost of 20 extra carts for the removal of refuse on the understanding that the Commissioner ascertain whether Messrs. Garlick & Co. will not consent to work the incinerator pending the decision of the Corporation for a similar or smaller monthly sum."

No. 9649. *Resolved* : "That the following be *recorded* :—Letter No. 19475, dated 20th instant, from the Commissioner, reporting, as required by section 92 (*a*) of the Municipal Act, that he has sold the right of cutting grass (22,777 square yards) from the sides of the open main drain between Arthur and Clerk Roads and from the banks (36,166 square yards) of the storm-water reservoir at Mahaluxmi, except the Vellard Bank, for one year from 1st January 1894 to Mr. Narsu Ellappa for Rs. 1,500."*

No. 9650. *Resolved* : "That the following be *recorded* :—Letter No. 19846, dated 23rd December 1893, from the Commissioner, reporting, as required by section 92 (*a*) of the Municipal Act, that he has sold, by public auction, for Rs. 2,030, the right of cutting grass and jungle and all dead trees from the Municipal ground at Vehar, Tulsi, Pawai and Tansa, and of removing mangoes, other fruits, tad and date palm leaves for one year as per list submitted."

No. 9651. *Resolved* : "That the following be circulated and brought on for consideration at a future meeting :—Letter No. 19556, dated 21st instant, from the Commissioner, requesting sanction, under section 216 of the Municipal Act, to the writing off of the amount of irrecoverable bills as per list submitted."

Considered again letter No. 18082, dated 2nd instant, from the Commissioner, to the Secretary on the subject of excess cost of law charges.

No. 9652. *Resolved* : "That letter No. 18082, dated 2nd instant, from the Commissioner, be forwarded to the Corporation, with a recommendation that sanction be given to an extra grant of Rs. 30,000, from surplus cash balance, to meet the excess cost of law charges up to the end of the financial year.

"That the Committee regret that the Solicitor's bills were allowed to stand over beyond a budget period."

* Last year the sale realized Rs. 900.

Considered the following :—

No. 18171 OF 4TH DECEMBER 1893.

Forwarded to the Standing Committee. The Commissioner entirely agrees with the Executive Engineer. The order for the removal of the "rewas" was given by the late Commissioner.

It was impossible for any one to foresee either the character of the claim on which the Municipality were defeated or the tergiversation of the witnesses.

H. A. ACWORTH, Commissioner.

4th December 1893.

No. 12074 OF 1893-94.

Bombay, 4th December 1893.

TO THE COMMISSIONER.

SIR,—With reference to your No. 17920, dated 30th November 1893, herewith returned, I have the honour to attach hereto brief notes of the case in question, from which the action taken by each Officer of the Municipality concerned in the case, will be seen.

2. In Major Laughton's Revenue Survey map and also in the plan submitted by the owner himself, while re-building his house, the whole of the lane in Bhoiwada Village, leading past Mr. Hari's house, including its portion over which the "rewas" was projected, is shewn as a "Street."

3. Under the circumstances and under the other circumstances described in detail in the annexed notes, it is clear that the Municipal Officers were perfectly justified in taking the necessary action for the removal of the "rewas" and are not at all to blame for doing so.

4. Ample time was also allowed to Mr. Hari either to remove the "rewas" or to prove that it projected on his own land; the first notice having been served on him on 28th May 1889 and final action taken on 19th January 1891, a period of nearly 1 year and 9 months.

5. The Judge also held that the lane in question was a "street" as defined by section 300 of the Municipal Act, but owing to some of the Municipal witnesses having proved unreliable, Mr. Hari was able to satisfy him that the particular portion of the lane over which the "rewas" projected was not a "street" because he exercised over it, from time to time, certain rights of ownership such as making a small temporary platform of earth during the Divali holidays, drying clothes and grain in front of the house, and erecting temporary mandap during marriage ceremonies.

6. The behaviour of some of the Municipal witnesses above referred to, is thus described by our Solicitors in their letter, dated 14th November 1892 :—

"We ought, perhaps, to remark that the evidence of several of the witnesses who were called on behalf of the Municipality

turned out to be disappointing and unreliable. These were for the most part persons who had resided in the village from infancy and who without exception stated to us, in the most positive terms, when we examined them, and took proofs of their evidence, that the plaintiff had never in any way or at any time interrupted the passage and access of the public to and over any part of the passage in question, but who in the witness-box evinced a very marked tendency in favour of the plaintiff. Not only did they say in their evidence in Court that the plaintiff had been in the habit of making an 'Angan' and of occasionally erecting mandaps upon a portion of the passage in front of his house, which may have been true, though inconsistent with their former statements, but some of them went so far as to say that there had, until comparatively recently, been a loose gurga wall across the passage, which was certainly untrue and which the Judge did not believe. In fact it appeared that these people being near neighbours of the plaintiff had been influenced in his favour.

"We regret to add that we cannot help entertaining some doubt whether one of the Health Department witnesses (one Vishram Gopal who also lives close by) gave his evidence in Court with that straightforwardness and independence which the Municipality had a right to expect, at any rate from their own servants. It may have been due to stupidity on his part, but his evidence in Court was at any rate very different from his statement to Mr. Crawford, when taking a proof of his evidence.

7. In delivering judgment His lordship stated that: "The villagers are a section of the public. They have used the passage for various purposes for more than 20 years and such members of the outside world as chose to use the passage, probably few and far between, were never prevented from doing so. This user in my judgment, brings the passage in question within the definition of a street as defined in Section III, Clause *w*. of Act III. of 1888, Bombay."

8. The Municipal Officers were, therefore, right in assuming that the passage was a "street" and in taking action on the strength of this assumption, I may respectfully point out that, it would not be right to hold them responsible for the perverseness of the witnesses who would say one thing to the Municipal Solicitors while giving their proofs of evidence and quite the reverse in the witness-box. These witnesses were, in my humble opinion, mainly responsible for the loss of the case.

9. It appears from the Commissioner's records that, the Taxing Master has allowed Rs. 2,294-1-0 as costs of the plaintiff payable by the Municipality under the decree and Rs. 2,763-0-4 as the cost of defending the suit, making a total of Rs. 5,057-1-4.—I have, &c.,

M. C. MURZBAN,
Executive Engineer, Municipality.

Notes on the Case—Hari Dwarkaji versus *the Municipal Commissioner.*

1. Mr. Hari Dwarkaji submitted a plan for re-constructing his building in a street in Bhoiwada village, on 17th January 1889, which was conditionally approved.

2. The plan showed no "rewas."

3. The plan showed that the whole of the land in front of the house was a "street."

4. While re-erecting the building a "rewas" 2 feet in width was built. Besides the "rewas," a portion of the house itself projected on this land.

5. A notice No. 28 was issued under section 308 on Mr. Hari, on 23rd May 1889, to remove the "rewas." This notice was initialled by the Divisional Superintendent Mr. Kaikhushru Pestonji Bhedwar, and signed by the then Municipal Commissioner.

6. Mr. Hari wrote on 28th May 1889, through his Architects, that he was the Fazendar of the whole cart and that the "rewas" projected on his own ground, and not on the street.

7. The Commissioner under his Nos. 5804, dated 29th June 1889, and 8531, dated 16th August 1889, informed the Executive Engineer that if he was completely satisfied that the ground covered by the projection was a part of a street, the usual steps should be taken for its removal.

8. Mr. Hari was, thereupon, replied to, that as the ground, covered by the projection, formed a portion of the street the projection should be removed. This letter is initialled by the Divisional Superintendent, Mr. Kaikhushru Bhedwar, and signed by the Acting Executive Engineer Mr. James Smith.

9. The next endorsement on the official file of papers is that of the acting Assistant Engineer Mr. N. D. Bhada, to the effect that if the notice under section 308 be not yet served, it must be served at once and the projection removed.

10. A fresh notice No. 179, under section 308, was issued on 27th February 1890. This notice was initialled by the Divisional Superintendent Mr. Kaikhushru Bhedwar and signed by the Municipal Commissioner.

11. To give effect to the above notice, Mr. Kaikhushru Bhedwar ordered the notice clerk to issue the usual entry notice on 11th April 1890. This usual entry notice was issued on 25th April 1890. It was initialled by the Superintendent Mr. M. S. Bharucha and signed by the Executive Engineer Mr. Walton.

12. Some correspondence was then carried on and the owner was allowed every opportunity to remove the "rewas" himself, but to no purpose. In compliance with the notices above referred to, action was taken on 4th November 1890, for the removal of the "rewas." On this day the owner's Engineer and the owner himself saw the Divisional Superintendent, Mr. Bharucha, in the Executive Engineer's Office, and requested him to stay action as the owner himself was willing to carry out the work of the removal of

the "rewas." On getting a written assurance from the Architect that in a week's time the "rewas" would be removed by the owner, Mr. Bharucha wrote to the Inspector of the Ward to stay action, which order was conveyed to the Inspector that same afternoon by the owner himself.

13. But instead of fulfilling his promise by removing the "rewas," the Architect carried on further correspondence. After replying to all his letters and waiting for a long time, action was resumed on 19th January 1891, and the "rewas" removed on 20th January 1891.

14. After removing the "rewas" it was found that the walls and roof of the small room of which the "rewas" formed a part were unsafe. The Divisional Superintendent, Mr. Bharucha, inspected the same and caused a notice under section 354 to be issued for pulling down, securing or repairing the room. The notice was initialled by Mr. Bharucha, and by the Executive Engineer Mr. Walton and signed by the Commissioner.

15. On the owner failing to comply with the above notice the ruinous portions of the room were removed by this department.

16. Mr. Hari then filed a suit against the Municipality claiming Rs. 3,000 as damages.

17. In order to limit the evidence and thereby considerably reduce the legal expense, it was arranged between the Judge and Counsels that should the Judge decide that the action of the Municipality was illegal, the room should be restored to its original state.

18. In order to establish the case on behalf of the Municipality it was absolutely necessary to call, as witnesses, some of the residents of the village who had resided in it from their infancy. The proofs of their evidence were taken by Mr. Crawford himself. These witnesses, while in the witness-box, gave evidence quite contrary to what they had given near Mr. Crawford, as explained by the Municipal Solicitors in their letter dated 14th November 1892.

19. While giving judgment the Judge held that the lane was a "Street" as defined by section 300 of the Municipal Act, but that the portion of the lane over which the "rewas" projected was not a street because the owner had exercised certain acts of ownership over it, *viz.*, (*a*) a small temporary platform of earth in front of his house, which was ornamented with native devices, on Devali holidays; (*b*) this small platform was then used for drying cloth and grain, and (*c*) Mandaps were erected during marriage ceremonies.

M. C. MURZBAN,
Executive Engineer.

No. 9653. *Resolved*: "That the following be forwarded to the Corporation, with reference to their Resolution No. 9223, dated 11th instant:—Memorandum No. 18171, dated 4th instant, from the Commissioner, submitting, with reference to the resolution of the Committee, No. 8149, dated 22nd ultimo, a report from the Executive

Engineer and stating that the order for the removal of the rewas was given by the late Commissioner, adding that it was impossible for any one to foresee either the character of the claim on which the Municipality were defeated or the tergiversation of the witnesses.

The consideration of the following was postponed till next week :—Memorundum No. 17338, dated 23rd ultimo, from the Commissioner, reporting on petition from Mr. Dosa Jiwan on the subject of the projection of his building in Lohar Chawl Street.

Resolved : " That the following be *recorded* :—Memo-
No. 9655. randum, No. 19639, dated 22nd instant, from the Commissioner, forwarding a statement, showing that, during the month of November 1893, a stable, 1E, in Ripon Road, the property of Mr. Abdul Razack bin Curtas, fell in owing to the bad workmanship of the building. Three horses were injured and the estimated loss was Rs. 5,000. The stables were built about two years ago. No action had been taken in this case by the Municipality.

" 2. That the Commissioner be requested to report the cause of the fall of the stables and the circumstances under which the building was allowed to be erected."

Resolved : " That the following be forwarded to the
No. 9656. Commissioner for favour of disposal, and that the applicants be informed accordingly :—Letter, dated 19th instant, from Messrs. Krishnaji Narhar, Keshav Govind Kanitkar and others, complaining of alleged nuisance caused by the tenents of house No. 83, Fanaswadi."

Resolved: That the following be *recorded* :—Letter
No. 9657. No. 19498, dated 20th instant, from the Commissioner, reporting that he has entrusted to the Indian Patent Stone Co. the work of paving with Indian patent stone (1) the piece of footpath on Kalbadevi Road near its junction with Bhuleshwar Road, at a cost of Rs. 283·50 ; and (2) the piece of footpath on Kalbadevi Road between Kika Street and Paidhowni, at a cost of Rs. 660·90. The total cost, Rs. 944·40, to be debited to the grant for paving footpaths.

The following statement * was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 24th December 1893.

* *See* Appendix **B**.

Resolved: "That in reply to her letter dated 21st instant,
No. 9658. Rujama Noorbibi be informed that if she objects to her tenant at Mahim she must take steps to remove him herself."

The following return was read and *recorded* :—

Return of fires at Bellasis Road, Dongri Street, DeLisle
No. 9659. Road (Hope Mill) and Chuckla, forwarded with the Commissioner's memorandum No. 19664, dated 22nd December 1893.*

Considered letter No. 12956, dated 21st instant, to the Commissioner :—

SIR,—In forwarding the accompanying letter, dated 13th November 1893, from Mr. Adamji Bhoyji, I have the honour to state that this is in connection with the case referred to in the correspondence ending with this office No. 10743 of 6th November 1893. The set-back required from the premises is 7'-11" on the south side and 8'-3" on the north and admeasures 16·61 square yards.

2. The work executed by the party within the regular line may be allowed to stand for the present if he accepts the following conditions :—

1*st*.—That he should make over and convey to the Municipality the whole of the set-back land, receiving compensation at Rs. 45 per square yard in full satisfaction of all his claims.

2*nd*.—He should give over at once to the Municipality possession of the vacant land occupied by the oatla and coloured blue on the attached tracing.

3*rd*.—The Municipality will let to him on a lease the remaining land scored in red and occupied by the building until such time as the house on the south side *coloured red* is set back.

4*th*.—That he should pay to the Municipality every year rent calculated at 6 per cent. on the amount the Municipality may have to pay to him for the said area of land scored in red.

5*th*.—That he shall not make any new work or work of addition or alteration in this part of the building.

6*th*.—That all charges of the Municipal Solicitors for drawing up the conveyance and lease, stamping, registration &c., shall be borne by him.—I have, &c., M. C. MURZBAN, Executive Engineer, Municipality.

Resolved : "That, as applied for by the Commissioner
No. 9660. in his letter No. 19843, dated 23rd instant, and with reference to the Resolution of the Committee No. 7857, dated 15th ultimo, sanction be now given to the unauthorised work erected within the regular street line by Mr. Adamji Bhoyjibhoy at Dongri Street being allowed to stand on the following conditions :—

'1. That he make over and convey to the Municipality the whole of the set-back land shown on the tracing

* *See* Appendix C.

marked "A," dated this day and filed in supplement to Minute Books, receiving compensation at Rs. 45 per square yard in full satisfaction of all his claims in respect of such land.

'2. That he give over possession at once to the Municipality of the vacant land occupied by the oatla and coloured blue on the tracing.

'3. That the Municipality let to him on a lease the remaining land scored in red on the tracing and occupied by the building until such time as the house on the south side *coloured red* is set back.

'4. That Mr. Adamji Bhoyji pay to the Municipality every year rent calculated at 6 per cent. on the amount the Municipality will have to pay to him for the said area of land scored in red.

'5. That he shall not make any new work or work of addition or alteration in this part of the building.

'6. That all charges of the Municipal Solicitors for drawing up the conveyance and lease, stamping, registration &c., shall be borne by him.'"

At the request of the Commissioner, the Committee again considered the question of the acceptance by Messrs. Bulkley and Company's tender for the Umerkhadi Sewerage Works.

Proposed by E. B. Carroll Esq., seconded by the Hon'ble Mr. R. G. Oxenham—

"That sanction be given to the acceptance by the Commissioner of the tender of Messrs. Bulkley and Company's, the second lowest of the four tenders received, for the Umerkhadi Sewerage Works, at schedule rates aggregating Rs. 2,48,873."

No. 9661.

Carried, the votes being 6 *for* and 4 *against*.

BOMBAY, 3*rd January* 1894.

AT the meeting of the Standing Committee held this day, there were present:

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
E. B. CARROLL, Esq., M.I.C.E.; THE HON'BLE MR. FAZULBHOY VISRAM; GRATTAN GEARY, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The signing of the minutes of the meetings held on the 20th and 27th ultimo, was postponed.

Resolved: "That, as applied for by the Commissioner in his memorandum No. 19895, dated 30th ultimo, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

No. 9795.

Name of Owner.	Where.
Bai Buchoobai, widow of Mr. Dorabji Burjorji Cooper	Building at Trimbuck Purushram Street."

Resolved : "That, as applied for by the Commissioner in his memorandum No. 20032, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 9796.

Resolved : "That, as applied for by the Commissioner in his letter No. 19901, dated 30th ultimo, the Committee approve, under section 91 of the Municipal Act, of his applying to Government to acquire, under the Land Acquisition Act, land belonging to the heirs of the late Mr. Jijibhai Dadabhai required for the improvement of Borah Musjid Lane as sanctioned in the Corporation's Rsolution No. 6723, dated 16th October last."

No. 9797.

Read letter from Mr. Eduljee Maneckjee.

Proposed by G. W. Roughton, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

"That Mr. Eduljee Maneckjee's application be referred to the Commissioner for favour of report as to whether he would recommend the Standing Committee to submit the question to the Corporation with a view to gratuity being granted to the applicant as a special case."

No. 9798.

Amendment, proposed by the Hon'ble Mr. R. G. Oxenham, seconded by E. B. Carroll, Esq.—

"That Mr. Eduljee Maneckjee be informed that the Standing Committee regret that they are unable to comply with his request as he is not entitled to any pension or gratuity under the terms of the Pension Regulations."

The *amendment* was *lost*, the votes being 3 *for* and 4 *against*.

The original motion was *carried* by 4 votes *against* 3 votes.

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 1st January 1894.

* *See* Appendix B.

BOMBAY, 10*th January* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; GRATTAN GEARY, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I. C. S., Commissioner ; the CHIEF ACCOUNTANT ; and the SECRETARY.

The signing of the minutes of the meetings held on the 20th and 27th ultimo and 3rd instant was postponed.

The Commissioner reported the results of the tenders received by him for Rs. 13,00,000 of paper on account of the twenty-five and a quarter lakhs Loan for Drainage and other works. On the whole, tenders for Rs. 36,64,500 were received. There were 35 tenders ; one of these was for the whole thirteen lakhs at Rs. 102-3-0, subject to the payment of $\frac{1}{8}$ per cent. brokerage, *i.e.*, at Rs. 102-1-0 per centum net. The highest offer, for a portion only, of the loan was Rs. 102-8-0.

It was agreed that sanction be given, as proposed by the Commissioner, to the acceptance of all tenders of and above Rs. 102-2-0, amounting to Rs. 5,29,000 in full, and that the available balance of Rs. 7,71,000 be distributed *pro rata* amongst different parties tendering for Rs. 13,83,000 at Rs. 102-1-0, the average rate of the accepted tenders, as above, being a little over Rs. 102-1-6.

No. 10153.

The seal of the Corporation was affixed to the following :—To deed of conveyance for the sale of 36·55 square yards, or thereabout, of Municipal land to Mr. Currimbhoy Ebrahim, situate at Kazi Street ; to an agreement in continuation of deed of contract with Messrs. Amrita Babaji, Vachaghandy, Bhedwar & Co., for the supply of sandstone, sand, shells and shingle during the year 1893-94.

The seal of the Corporation was affixed to (1) one consolidated debenture for Rs. 1,000, Nos. 1124 and 1125 N. N., of the Bombay Municipal Sanitary Works Loan of 1885 ; (2) two attested duplicate debentures of the Bombay Municipal Loan of 1878, Nos. 2525 and 2526, for Rs. 500 each ; (3) five attested duplicate debentures

of the Bombay Municipal Sanitary Works Loan of 1885, Nos. 80 N. N., 2070 N. N., 2071 N. N., 7378 N. N. and 7379 N. N., for Rs. 500 each; (4) nine attested duplicate debentures of the Tansa Water Works Loan, Nos. 832, 834, 845 to 848, 850, 3920 and 3921, for Rs. 500 each; (5) twelve attested duplicate debentures of the Tansa Water Works Loan, Nos. 993/4 to 999/1000, 1039/40 to 1043/44, 1047/48 and 13201/2 to 13207/8, for Rs. 1,000 each.

No. 10156. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 21078, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 10157. *Resolved*: "That the following be *recorded*:—Letter No. 20436, dated 5th instant, from the Commissioner, reporting, as required by section 69 (*d*) of the Municipal Act, that he has sanctioned the purchase of 50 half inch Siemens' meters at Rs. 30 each and 50 three-fourths inch Taylor's meters at Rs. 29-8-0 each, from Messrs. Walsh, Lovett and Co. for the Water Works Department. The total cost, Rs. 2,975, to be met out of the advance for Water Works stores and fittings, to be subsequently adjusted against the grant for materials when the meters are issued on hire."

Considered letter No. 20156, dated 4th instant, from the Commissioner to the Secretary.

Proposed by E. B. Carroll, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

No. 10158. "That letter No. 20156, dated 4th instant, from the Commissioner to the Secretary, be forwarded to the Corporation, with a recommendation that, as a special case, sanction be given to the payment of compassionate allowance to the widow of Mr. Pestonji Ardasir Moos, late Inspector in the Water Works Department, who died of strangulated hernia on 10th November last, his disease having, according to Dr. Parakh's certificate, been aggravated, if not brought on, by the deceased's unusual exertions for two or three nights previous in connection with fires.

"That the amount of the allowance be Rs. 1,500, to the debit of surplus cash balance."

Carried.

Resolved : " That the following be referred to a Sub-committee, consisting of the Chairman, the Hon'ble Mr. Javerilal U. Yajnik, Mr. Roughton, and Mr. K. M. Shroff, for enquiry and report:—

No. 10159.

Letter No. 20432, dated 5th instant, from the Commissioner, reporting on the prosecutions which were instituted by the Municipality last year against persons believed to have committed frauds by obtaining refunds of town duty on false documents. Requesting sanction to the employment of a staff at an annual cost of Rs. 5,424 in order to protect the revenue from similar frauds in future."

Considered letter No. 11004, dated 14th November 1893, to the Commissioner as under:—

SIR,—I have the honor to report that I have obtained quotations from Messrs. Colebrookdale & Co., the original makers of the gates, for the several portions of the gates.

2. I beg to submit alternative estimates framed on the quotations above mentioned which furnish all the required information. Estimate marked A is for obtaining entirely new gates from England and putting them up. The amount of this estimate is Rs. 14,363.

3. In my letter No. 3336, dated 5th June 1893, I have submitted the following proposals:—

1*st*.—To repair and re-erect the two large central gates and the four small ones and to provide a new leaf to the former. The cost of this work is estimated by

The Ripon Iron Manufacturing Co. at ...	Rs.	2,455
Messrs. Gahagan and Co. at	„	2,500
The Municipal Workshops	„	2,402

2*nd*.—To supply entirely new central gates, to be made of wrought and cast iron and to repair and refix the side ones at a cost of Rs. 2,657.

3*rd*.—To repair and refix the side gates and to leave the central gates open with movable iron bars to be fixed at night to keep out cattle as shown by red lines on the plan accompanying my letter above quoted at Rs. 1,200.

4. The cost Rs. 2,402+150 for the lamps = Rs. 2,552 estimated by this office includes Rs. 648 for providing an entirely new cast-iron leaf for the large gate in lieu of the broken one. If this leaf were obtained from England, it would cost Rs. 886, exclusive of fixing, or Rs. 1,086, including fixing. In all, the cost would be Rs. 2,990, instead of Rs. 2,552, which would be the cost of the work, if it were done in Bombay.

5. It is now for you and the Standing Committee to decide whether the work should be done here at a cost of Rs. 2,552, or whether one of the gates should be ordered out from England at an extra cost of Rs. 438, inclusive of fixing as per estimate B.

6. There is no doubt that the English casting would be superior and better in finish than the Indian one.—I have, &c.,

M. C. MURZBAN, Executive Engineer.

No. 16984 of 1893-94.

18*th November* 1893.

Copy forwarded to the Municipal Secretary, with reference to the Standing Committee's Resolution No. 3041 of 28th June 1893, for the order of that body.

H. A. ACWORTH, Commissioner.

After discussion, it was agreed by 4 votes *against* 3 votes that, in the opinion of the Committee, the gates should be re-erected.

Proposed by E. B. Carroll, Esq., seconded by the Hon'ble Mr. R. G. Oxenham—

"That letter No. 5508, dated 16th June, and memorandum No. 16984, dated 18th November last, from the Commissioner to the Secretary be forwarded to the Corporation with a recommendation that sanction be given to the expenditure of Rs. 2,990 out of surplus cash balance to meet the cost of the re-erection of the gates of the Elphinstone Circle Garden."

Rider proposed by A. G. Viegas, Esq.—

"That it is a matter for grave censure on the responsible officer concerned that the gates were allowed, through gross carelessness, to rust during a period of seven years and to become damaged."

As this rider was not accepted, the following was moved as an amendment :—

Amendment propos ed by A. G. Viegas, Esq., seconded by Kaikhosro N. Kabraji, Esq.—

"That letter No. 5508, dated 16th June 1893, and memorandum No. 16984, dated 18th November 1893, from the Commissioner to the Secretary, forwarding report No. 11004 of 14th idem from the Executive Engineer, be forwarded to the Corporation with a recommendation that sanction be given to the expenditure of

No. 10160.

Rs. 2,990 from surplus cash balance to provide for the cost of repairing and re-erecting the gates of the Elphinstone Circle Garden.

"That it is a matter for grave censure on the responsible officer concerned that the gates were allowed, through gross carelessness to rust during a period of seven years and to become damaged."

The amendment was carried as a substantive proposition by 5 votes *against* 4.

The consideration of the Health Officer's report for the fourth quarter of 1893 was postponed.

Read letter No. 20505, dated 6th instant, from the Commissioner to the Secretary as under :—

SIR,—With reference to Standing Committee's Resolution No. 8921 of 6th ultimo, I have the honor to forward copy of a letter from the Traffic Manager, Port Trust, which gives some useful figures. The penultimate paragraph of Mr. Baird's letter expresses my own views, and it is because I feel that we realize now all that we can expect legitimately to obtain, and that if the tolls be farmed at the price offered, they are likely to be turned into an instrument of illegality and extortion, that I am averse to accepting Mr. Fazulbhai Peerbhai's offer.—I have, &c., H. A. ACWORTH, Commissioner.

BOMBAY PORT TRUST,
TRAFFIC MANAGER'S OFFICE,
23*rd December* 1893.

No. $\frac{39}{1985}$ OF 1893-94.

To THE COMMISSIONER.

SIR,—I have the honor to acknowledge receipt of your No. 1981 of 16th instant and its accompaniments relative to an offer made by one Mr. Fazulbhai Peerbhai to farm the Municipal vehicle tolls at Mahim and Sion for the period of 5 years for a sum of Rs. 2,000 over and above the annual net realizations of the Municipality for the last 5 years from 1888-89 to 1892-93. The net realization for the past 5 years was as follows, quoting from the Municipal Annual Administration Reports for convenience. Collections for 1888-89, Rs. 14,224 ; do. 1889-90, Rs. 12,835 ; do. 1890-91, Rs. 12,407 ; do. 1891-92, Rs. 13,087 ; do. 1892-93, Rs. 12,331—Total Rs. 64,884. Annual gross average Rs. 12,977. *Deduct*—Paid to Port Trust for establishment, Rs. 1,680 ; cost of printing ticket books, blank books, and kerosine oil, say Rs. 200, Rs. 1,880. Net realization Rs. 11,097. Add additional amount offered Rs. 2,000—Total Rs. 13,097 ; say Rs. 13,100 as offered by Mr. Fazulbhai Peerbhoy. In order to pay that amount and at the same time allow for profit and to defray cost of establishment,

&c., which at the lowest could hardly be less than Rs. 1,500, it will be necessary for the party to collect not less than Rs. 14,500 per year. In my opinion that large sum could not be legitimately collected either by this department or under any system of collection whatsoever, unless (1) Bombay vehicles which, under your instructions, are now exempted from charge, are charged the toll. There were 38,526 entries of such vehicles and which passed free in 1892-93, the licensed numbers of each being recorded in every case; (2) the tolls were increased from 2 annas; (3) some special cause operates to bring additional traffic from Salsette. The Municipality, in receiving Rs. 13,100 per year as offered, would decidedly gain, although the contractor must certainly lose unless he recouped himself by illegitimate and illegal levy of toll on Bombay vehicles entitled as such to pass free. As stated in a previous part of this letter, there were no less than 38,526 entries of such free vehicles recorded last year. It is however for the Municipality to decide by what agency the toll should be collected. In the event of any change in the present arrangement being made, I presume timely notice will be given to the Trustees.—I have, &c., J. P. BAIRD, Traffic Manager.

Resolved: That letter No. 20505, dated 6th instant, from the Commissioner to the Secretary, be *recorded*.

No. 10161. 2. That in reply to his letters dated 22nd and 27th November last on the subject of the purchase of the right of collecting toll fees on the Mahim and Sion Causeways, Mr. Fazulbhai Peerbhai be informed that it is not proposed to make any alteration at present in the agency for the collection of the fees in question.

No. 10162. That in reply to their undated letter to the Secretary, Messrs. Rawji Narayan, Tulsidas Madanji, contractor, and other residents of Mohamed Khan Pakhadi Lane, be informed that their lane cannot be lighted at the Municipal expense as they have already been told by the Commissioner.

No. 10163. *Resolved*: That further letter dated 5th instant, from Rajooma Noorbibi on the subject of the removal from her Fazindari land at Mahim of a stable for buffaloes be forwarded to the Commissioner, and that applicant be informed accordingly.

Considered again application from Mr. Eduljee Manekjee, late Inspector of private markets, for a gratuity.

Read further letter from him to the Chairman, dated 9th instant, stating, with reference to the newspaper reports of the proceedings of the last meeting of the Committee, that applicant is not in affluent circumstances and that he does not possess expensive furniture or silver-mounted harness.

Read also letter No. 20792, dated 8th idem, from the Commissioner to the Secretary as follows :—

SIR,—In answer to Standing Committee's Resolution No. 9798 of 3rd instant, I have the honor to say that no pension or gratuity is admissible under the rules and the applicant was informed as far back as 1882 that he could not be admitted to the benefits of the Pension Fund. His appointment was paid from private market fees and was never scheduled till this year. Moreover he was over 35 years of age when he entered the Municipal service. There is no reason that I am aware of for a special case being made in his favour that would not equally apply to almost every person who serves the Municipality without belonging to the Pension Fund.—I have, &c.,

H. A. ACWORTH, Commissioner.

No. 10164. *Resolved* (with one dissentient): "That letter No. 20792, dated 8th instant, from the Commissioner to the Secretary be *recorded*.

"That, in reply to his letters, dated 30th ultimo and 9th instant, Mr. Edulji Maneckji be informed that, as he was not a contributor to the Pension Fund, no gratuity can be granted to him under the Pension Regulations."

Read letter, No. 20791, dated 8th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to recent discussion at the Standing Committee, I have the honor to say that Mr. Garlick is prepared to undertake the working of the Incinerator at a price of 3 annas per cart, the cutchra being deposited on the roof of the furnaces by us. This latter item would cost Rs. 82 per mensem. The Incinerator was recently not worked when the wind was from the east owing to complaints from the school of art, and this reduces its efficiency to about 80 carts a day. This would cost Rs. 450 per mensem at Mr. Garlick's rate plus Rs. 82 as above stated, or a total of Rs. 532. This is much less than the cost of 20 extra carts reported on in this office No. 19806 of 23rd ultimo to be Rs. 697-8-0, and though we could probably work the Incinerator for this quantity of cutchra at less than Rs. 532, it seems worth while to accept the offer.—I have, &c., H. A. ACWORTH, Commissioner.

No. 10165. *Resolved*: "That letter No. 20791, dated 8th instant, from the Commissioner, be forwarded to the Corporation in continuation of the Committee's resolution No. 9648, dated 27th ultimo, with a recommendation that sanction be given to the acceptance of Mr. Garlick's offer to work the incinerator at a cost of annas three per cart-load, the cutchra being deposited by the Municipality on the roof of the furnaces. The total cost,

viz., Rs. 450, per mensem for working the incinerator and Rs. 82 per mensem for depositing the cutchra on the roof of the furnaces, Rs. 532, to be met from savings in the grant for 2, labour, scavengering, feed of bullocks, Health Department Budget."

The following return was read and *recorded* :—

No. 10166. Return of fires at Cabul Street (Paidhoni), Badhin Gully, Supari Baug (Parel Road), Abdul Raman Street, Hornby Road, and Duncan Road, forwarded with the Commissioner's memorandum No. 20523, dated 6th January 1894.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 7th January 1894.

No. 10167. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 20834, dated 9th instant, sanction be given to the transfer of Rs. 500, from savings in the Conservancy Branch, Section III, Disposal of Town Sweepings (earth to cover cutchra deposits), Health Department Budget, to the Budget grant for election expenses, to meet excess on the latter head, due to the increased number of elections held during the year."

No. 10168. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 20852, dated 9th instant, sanction be given to the transfer of Rs. 500, from savings in the Drainage Branch, A, Miscellaneous, Drainage Section II, Main Sewer Establishment, Engineer's Budget, to same head, II, Stores, to meet excess on the latter head, on account of payments for brass moulds for testing cement, drain testers, rope for manholes, &c."

No. 10169. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 20853, dated 9th instant, sanction be given to the transfer of Rs. 375, from savings in the Drainage branch, repairs to buildings at Love Grove, to same head, Section III, Repairs to machinery thereat, to meet excess on the latter head, due to repairs to old engines, which had to be worked for a longer period than was anticipated when the budget estimates were framed."

* *See* Appendix C. † *See* Appendix B.

Resolved : " That, as applied for by the Commissioner, in his memorandum No. 21023, dated this day,
No. 10170. and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 14,650, from savings in the grant for streets and buildings, D, road repairs and maintenance, to same head, sections I and V, to meet excess on the latter sections due to the purchase of metal, sandstone, brushing machines and other materials for road repairs."

Resolved : " That, as applied for by the Commissioner, in his memorandum No. 21024, dated this day,
No. 10171. the Corporation be recommended to sanction the writing off of Rs. 2,590-10-0, from the Live Stock Return of the Health Department, being the book value of 39 bullocks which died, and 1 which was destroyed, during the quarter ending 30th November 1893.*

Considered list of " Outstanding Business," 1st January 1894, item No. 11, letters, dated 22nd and 27th November 1893, from Mr. Fazulbhai Peerbhai, on the subject of the purchase of the right of collecting toll fees on the Mahim and Sion Causeways. Referred to the Commissioner for favour of report (6th December 1893).

Struck out, the report having been this day considered and disposed of.

BOMBAY, 17*th January* 1894.

AT the Meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR. Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meetings held on the 20th and 27th ultimo and 3rd and 10th instant were signed.

Resolved : " That, as applied for by the Commissioner, in his memorandum No. 22018, dated this day,
No. 10585. sanction be given to the cutting off of water connections as per list submitted therewith "

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* *Causes of Death*: 2 disease of horn ; 20 old age and general debility ; 10 inflammation of heart, lungs, &c. ; 1 hoven ; 1 cystic lungs ; 2 disease of heart ; 1 disorder of spleen ; 1 peritonitis ; 1 malignant œdema of throat—Total 39 died and 1 destroyed in Bullock Hospital. Total died and destroyed 40.

Where died, &c.—24 Bullock Hospital ; 4 Foras Road Stables (D Ward) ; 1 Mahim Stables (G Ward) ; 2 Kamathipura Stables (E Ward) ; 6 Bori Bunder Stables ; 3 Kamathipura Stables (N. Branch)—Total 40.

Quarterly percentage of losses on the whole strength (1,979) of bullocks, 6.

No. 10586. On the application of the Commissioner, the Committee sanctioned the investment in 4 per cent. Government paper of Rs. 9,00,000 out of the Rs. 13,00,000 just realized on account of the loan of 25¼ lakhs for Drainage and other works.

Considered letter No. 21377, dated 12th instant, from the Commissioner to the Secretary, as under :—

SIR,—In June 1892 one Mr. Jaikisandas Gangadas having applied for permission to rebuild the compound wall of his property No. 817-823, Jail Road East, he was required to set back the wall to the regular line of the street, leaving a set-back measuring 49·72 square yards to be added to the road. In August 1893 the Municipality took possession of the set-back ground. The compensation for the ground taken up, however, is claimed on the one hand, by Mr. Jalbhai Ardesir Sett as the lessor of the ground, and on the other, by Mr. Jaikisondas Gangadas, on whose behalf Messrs. Little, Smith, Nicholson, and Bowen contend that Mr. Jalbhai Ardesir Sett is merely the Fazandari and that their client is the real owner of the land and as such is entitled to the compensation.

Each party offers, upon receiving the compensation, to give the Municipality an indemnity against any action by the other, but the Municipal Solicitors advise that "although no doubt the indemnity "of either of the above parties will be sufficient to cover any cost "incurred by the Municipality in respect of any suit that might "be filed by either of them against the Municipality, the latter "would still take upon themselves the burden of a suit with all the "attendant loss of time and trouble, whereas, by filing an inter-"pleader suit, beyond the statement necessary to be filed, no further "responsibility or trouble is thrown upon the Municipal Officers."

I have the honour, therefore, to request the sanction of the Standing Committee to an interpleader suit being filed in the Court of Small Causes. The amount of compensation will be about Rs. 994-7-0.—I have, &c.

H. A. ACWORTH, Commissioner.

No. 10587. *Resolved* : "That, as applied for by the Commissioner in his letter No. 21377, dated 12th instant, sanction be given to an interpleader suit being filed in the Court of Small Causes in order to establish the claim of the person entitled to receive compensation from the Corporation in respect of 49·72 square yards or thereabouts of land acquired at Jail Road East."

No. 10588. *Resolved* : "That, as applied for by the Commissioner, in his memorandum No. 21605, dated 15th instant, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,500 from savings in

the grant for Section II, Feed of Animals, Victoria Gardens, to Section II, Contingencies, same branch, to meet excess on the latter head, due to the purchase of a large quantity of hose and implements and repairs to implements."

No. 10589. *Resolved* : "That, as applied for by the Commissioner in his letter No. 21375, dated 12th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. Bhaidas Narotamdas for the recovery of Rs. 65-11-7 in respect of property taxes and notice fees as per statement submitted."

No. 10590. The consideration of the question of the acceptance of tenders for the supply of disinfectants during 1894-95 was postponed, and the Commissioner was asked to advertise for fresh tenders without specifying the names of manufacturers and to state in the advertisement the strength of disinfectants required.

Considered the following :—

No. 138.

JUDICIAL DEPARTMENT.

Bombay Castle, 10th January 1894.

Letter from the Commissioner of Police, Bombay, No. 6276—40, dated the 6th October 1893, forwarding the following statement showing the Budget Estimate of expenditure on account of the Public Land Conveyance Licensing Dept. for the year 1894-95 :

Establishment.—1 Head Clerk (Rs. 65), Rs. 780 ; 1 Clerk (Rs. 45), Rs. 540 ; 1 Clerk (Rs. 30), Rs. 360 ; 1 Painter (Rs. 25), Rs. 300 ; 1 Branding man (Rs. 12), Rs. 144 ;—Rs. 2,124. *Allowance*—1 Deputy Commissioner (Rs. 75), Rs. 900 ; 4 Police Inspectors (Rs. 40 each), Rs. 1,920 ;—Rs. 2,820. *Supplies and Services*—Tin plates, brass badges, &c., Rs. 3,000. *Contingencies*—Stationery and Printing, Rs. 1,200 ; Miscellaneous, Rs. 500 ;—Rs. 1,700. Grand total Rs. 9,644

and requesting sanction to the expenditure as required by Section 62, Clause (*b*), of the City of Bombay Municipal Act III of 1888. Stating that the statement shows an increase of Rs. 360 per annum on account of the salary of an additional clerk on Rs. 30 per mensem to be entertained from the 1st April next, which the Municipal Commissioner and himself have deemed to be necessary ; and adding that the expenditure has been entered in the Police Budget already submitted to the Accountant General.

Letter from the Commissioner of Police, Bombay, No. 7516—40, dated the 22nd November 1893, forwarding, with reference to this Department letter No. 6960, dated the 4th November 1893, a statement obtained from the Municipal Assessor and Collector

showing the total amount of fees levied for licenses on account of Public Land Conveyances during the past three years, and a copy of the correspondence marginally noted between himself and the Municipal Commissioner, which explains the reason why the employment of an additional clerk is deemed necessary.

Letter from the Commissioner of Police, Bombay, to the Municipal Commissioner for the City of Bombay, No. 5945—40, dated the 23rd Sept. 1893.
Letter from the Municipal Commissioner for the City of Bombay, No. 13402, dated the 3rd October 1893, to the Commissioner of Police, Bombay.

RESOLUTION.—The Budget Estimate submitted by the Commissioner of Police, Bombay, is sanctioned.

G. C. WHITWORTH,
Acting Secretary to Government.

No. 21517 of 1894.

Dated 13th January 1894.

Copy forwarded for information to the Standing Committee.—H. A. ACWORTH, Commissioner.

Resolved : "That the following be *recorded* :—Memo-
No. 10591. randum No. 21517, dated 13th instant, from the Commissioner, forwarding Government Resolution No. 138, Judicial Department, dated 10th idem."

Read the following letter, dated 15th instant, to the Chairman of the Standing Committee :—

SIR,—I am requested by the House Connections Committee to state that since the date of the Corporation's Resolution No. 11763 of 6th February 1893, eight meetings of the Committee have been held, a large amount of printing has had to be done, and charges incurred for the services of a short-hand writer. The Committee find, as the inquiry proceeds, that a large additional amount of information still has to be obtained and that probably several more meetings will have to be held and important evidence recorded thereat, before the Committee will be in a condition to present their final report and recommendations to the Corporation.

It is estimated that the additional charges incurred and to be incurred will amount to about Rs. 2,000, and I request that the Standing Committee will recommend the Corporation to sanction a grant of that amount as soon as convenient.—I have, &c.,

JAVERILAL U. YAJNIK,
Chairman.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the Corporation be recommended to sanction the
No. 10592. grant of Rs. 2,000 from surplus cash balance to meet the further cost of printing and reporting the proceedings of the House Connections Committee and the printing of the Committee's report."

Carried.

Resolved : "That the report of the Health Officer for the 4th quarter of 1893 be passed on to the Corporation."*

No. 10593.

In accordance with notice, it was proposed by the Hon'ble Mr. Javerial U. Yajnik—

"(1) That the Municipal Commissioner be requested to expedite his report on the Committee's Resolution No. 5774, dated the 20th September 1893, on the subject of the special charges made under section 172 of the Municipal Act for halalkhore service.

"(2) That the Commissioner be requested to furnish a statement showing in each ward of the City—

(1) The number of properties which receive their water-supply by meters.

(2) The amount of revenue derived from such meter service.

(3) The amount of revenue to which such properties would have been assessable if they were supplied with water in the ordinary way.

(4) The number of properties supplied with water in the ordinary manner.

(5) The revenue obtained therefrom.

(6) The total number of properties supplied with water under one or other form of service and the total revenue actually derived by means of such service which would have been obtained if the whole of the properties had been assessed in the ordinary way."

The motion was seconded by K. M. Shroff, Esq.

As the Commissioner stated that the information asked for will be embodied in the report now being prepared, the notice was *withdrawn*.

Resolved : "That the following be forwarded to the Commissioner for favour of remarks :—Memorandum from the Municipal Secretary, forwarding petition, dated 15th instant, addressed to the Corporation by Mr. Bechardas Morlidhur regarding the improvement of Agripada."

No. 10595.

Resolved : "That, with reference to the accompanying petition from residents of Jagannath's Chawl, Fanaswadi, dated 22nd November last, com-

No. 10596.

* *See* Appendix A.

plaining of the inadequate water-supply, the Standing Committee beg to forward to the Corporation herewith letter No. 21545, dated 13th instant, from the Commissioner reporting that the old service main became choked, but that the usual supply of water has been restored to the applicants."

Resolved: "That the following be recorded :—Memorandum No. 21511, dated 13th instant, from the Commissioner, forwarding analyses of water as under :— No. 10597.

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir on the 22nd December 1893.

	Parts per million.
Free Ammonia	·02
Albuminoid Ammonia	·12

Sample of partly filtered Tulsi water taken from the distributing tank, Malabar Hill Reservoir, on the 22nd December 1893.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·10

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 23rd December 1893.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·12

Sample of filtered Vehar water obtained from the Vehar filters on the 3rd January 1894.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·07

Sample of unfiltered Tansa water drawn from a hydrant on 27" main, in Arthur Road, on the 4th January 1894.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·12

"That the Health Officer be asked to furnish further analysis of water for the next meeting of the Committee."

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 14th January 1894.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 21823, dated 16th instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, No. 10598.

* *See* Appendix B.

sanction be given to the transfer of Rs. 600, from savings in the grant for IV, Streets and Buildings, A, I, Outdoor Establishment, to General Department, Section 4, Advertisements and Contingiucies, and Streets and Buildings, Section 2, Advertisements and Contingencies, to meet excess consequent on cost of removal of office furniture and records to the new Municipal office."

No. 10599. *Resolved*: "That, as applied for by the Commissioner in his letter No. 21752, dated 15th instant, sanction be given, under section 172 of the Municipal Act, to a special halalkhor rate of Rs. 2-8-0 per month being charged to each of the tents on the Cooperage encamping ground."

No. 10600. *Resolved*: "That the following be recorded:—Letter No. 21751, dated 15th instant, from the Commissioner reporting that he has accepted the tender of Mr. Purbhut Mowji, the second lowest of the three tenders received, for constructing the commemorative arch at the Tansa Lake at a cost of Rs. 2,259-14-3."

No. 10601. It was agreed that the consideration of the Commissioner's letter No. 21917, dated 16th instant, on the question of the leasing of the ground-floor of the office building of the Pinjrapole Committee, for the occupancy by the stall-holders of the Bhuleshwar Market, be postponed till next meeting, and that in the meantime the letter be circulated to members of the Committee.

BOMBAY, 24*th January* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; GRATTAN GEARY, Esq.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; the HEALTH OFFICER; and the SECRETARY.

The minutes of the meeting held on the 17th instant were signed.

The Secretary handed in the following letters from the Hon'ble Mr. Fazulbhoy Visram and Mr. E. B.

Carroll on the subject of the statement made by Mr. Edalji Manekji, late Inspector of Private Markets, regarding his furniture :—

BOMBAY, 23*rd January* 1894.

H. W. BARROW, Esq.,
Municipal Secretary.

DEAR SIR,—I forward, at the Hon'ble Mr. Fazulbhoy Visram's request, a letter addressed to you, as also catalogue and advertisement of the sale of Mr. Edalji Manekji Vakharia's furniture, &c., showing that the statements made by Mr. Fazulbhoy and me were correct, and the contradiction of the same by Mr. Vakharia incorrect ; and as this contradiction was made publicly to the Standing Committee and was, I think, in the papers, we ask that the same publicity may be given to these particulars, which prove conclusively that Mr. Vakharia made an incorrect statement and attempted to deceive the members of the Standing Committee.—Yours faithfully,

E. B. CARROLL.

CALCUTTA, 20*th January* 1894.

TO THE MUNICIPAL SECRETARY.

DEAR SIR,—With reference to the proceedings of the meeting of the Standing Committee of the 10th instant, appearing in the "*Times of India*" of the following day, and in view of the letter from the late Inspector of Private Markets included therein, in which he takes exception to certain remarks (not correctly reported) made by myself and Mr. E. B. Carroll during the discussion on Mr. Edulji Manekji Vakharia's application for a gratuity, I beg now to enclose herewith a catalogue of his furniture and other effects as sold by Messrs. Crawford & Co. on the 29th day of October 1893. Apart from anything else, this alone will show whether we were justified or not in making the remarks we did regarding the circumstances of the said applicant in the interests of the Municipality.—Yours faithfully,

FAZULBHOY VISRAM.

The seal of the Corporation was affixed to the following :— (1) To deed of agreement between Mr. Chaturbhoj Murarji, Manager of the trust property of the Maharaj Goswami Shri Vittulnathji *alias* Kanialalji Valabhji, and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of premises Nos. 42 to 54, situate at Vithalwady, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed, and at the rate of Rs. 40 per square yard, in full satisfaction of his claim under section 301 as the value of the said ground and for any loss, damage, or expense sustained by him by reason of such

acquisition; (2) to deed of contract (in duplicate) with Messrs. Hughes and Lancaster for works in air-compressing machinery under the Shone System for the sewerage of the Colaba district; (3) to deed of agreement for the leasing to Mr. Bisasor Bindraban of 17,000 square yards Municipal ground at Tardeo Flats for the purpose of stacking hay; and (4) to two attested duplicate debentures (1) of Rs. 500 of the Municipal Loan of 1878, No. 3543, and (2) of Rs. 500 of the Tansa Water Works Loan, No. 111.

No. 11007. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 21816 and 21817 of 16th instant, and Nos. 21983 and 22089 of 17th and 18th idem, respectively, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.		Where.
Mr. Gainoo Chrishnajee	...	Building at No. 702-704, Dongri Street.
„ Balkrishna V. N. Kirtikar, Agent of the Raja of Vyankantgiri	...	„ „ 3, Matharpakady.
„ Framji Edaljee Soonawalla	...	„ „ 104, Wodehouse Road.
„ Madusudan Damodar	...	„ Lady Jamsetji Road."

No. 11008. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 22666, dated this day, sanction be given to the cutting off of water-connections as per list submitted therewith."

No. 11009. *Resolved*: "That, as applied for by the Commissioner in his letter No. 22049, dated 17th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. Babul Abu for the recovery of Rs. 21-2-2, being the amount of property taxes and notice fees due in respect of house, Ward No. 3137, Sivri Koliwada."

No. 11010. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 22040, dated 17th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Messrs. Kavasji D. Rastamji, Kavasji P. Framji and Byramji N. Framji, Trustees of the Parsi Fire Temple Nos. 1 to 7, Thakordwar Road, for the recovery of Rs. 205-9-7 in respect of property taxes and notice fees."

Resolved : "That, as applied for by the Commissioner in his letter No. 22356, dated 20th instant, and with reference to the resolution of the Committee, No. 9922, dated 21st December 1892, sanctioning the filing of a suit against Mr. Babu Ramchundra for the recovery of Rs. 43-8-1 in respect of property taxes, sanction be now given to the filing of such suit for the recovery of Rs. 55-7-3."

No. 11011.

Resolved: "That, as applied for by the Commissioner in his letter No. 22126, dated 18th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a further suit being filed in the Court of Small Causes against Mr. Sayed Kasam bin Sayad Hoosein for the recovery of Rs. 143-14-0 on account of property taxes, due in respect of house, Ward No. 7253, Khoja Street."

No. 11012.

Read the following letter No. 30147 of 1893-94, dated Bombay, 17th January 1894, to the Commissioner :—

SIR,—I regret to have to report that there is a severe epidemic of foot-and-mouth disease amongst the cattle in this city. There are now in the hospital 134 bullocks of the Health Department in isolation and under treatment, and we have had as many as 285. There are grounds for apprehending that the epidemic may be followed, as it has been followed before, by much sickness towards the end of the year amongst human beings. I suggest that the Standing Committee be informed of the epidemic.—T. S. WEIR, Health Officer.

No. 22073 *of* 17*th January* 1894.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by Grattan Geary, Esq.—

"That, with reference to his letter No. 30147 of the 17th instant, the Health Officer be asked to report in time for the Committee's next meeting as to (1) the nature of the sickness among human beings which is to be apprehended from the epidemic of foot-and-mouth disease among cattle, and (2) as to the means which, in his opinion, should be adopted for the prevention of the said sickness."

No. 11013.

Carried.

Resolved : "That the Corporation be recommended to sanction the expenditure of Rs. 250, from surplus cash balance, on account of charges in connection with the presentation of the address to Dadabhai Navroji, Esq., M.P., in the Town Hall on the 11th instant."

No. 11014.

Considered letter No. 21917, dated 16th instant, from the Commissioner to the Secretary, as under:—

SIR,—During the process of pulling down and rebuilding the Bhuleshwar Market it will be necessary to make temporary provision elsewhere for the present holders of stalls, in order that the business of the market may not be altogether interrupted. After some inquiry, I have decided to recommend to the Corporation an offer made by the Secretary, Pinjrapole Committee, to lease to the Municipality the ground floor of their office building, which, with certain alterations which they will pay for and with the addition of stalls which we must pay for, will be a very suitable place. The floor is paved and there is a good verandah, and it will accommodate 110 out of the present number—123—of stall-holders. Ten or a dozen of the latter will not, I understand, care to remove to it. The terms of the Pinjrapole Committee are—

(1) That the rent for the whole of the ground floor of the said building should be Rs. 500 per month, free and clear of all Municipal rates and taxes, including water and halalkhor rates, which should be borne by the Municipality and which will amount to Rs. 77½ per month.

(2) That the stalls for the market should be erected by the Municipality, and should be, at the expiration of the lease, removed at its own expense.

(3) That the western and the middle walls of the building will be removed by the trustees and re-erected by them, at the expiration of the lease, at the Pinjrapole expense.

(4) That the trustees at their own expense will enclose the western boundary of the building by corrugated iron sheets.

The erection of the new market will take about two years, and financially the proposal will work out nearly as follows :—

Rent at Rs. 500 per mensem = Rs. 6,000 per annum or	Rs.	12,000 for two years.
Removal, re-erection, and repair of stalls, about	„	2,000
Municipal taxes for two years ...	„	1,860
	Rs.	15,860

Income Rs. 7,700 per annum = Rs. 15,400 for two years. This is based on the assumption that only 110 stalls will be occupied with the addition of Rs. 2,200 per annum from squatters.

I have the honor to ask sanction to these arrangements. It is necessary to give an early answer to the Pinjrapole Committee, and

I hope that all details at present in issue between Government and the Corporation will be cleared up and the work on the new buildings commenced by the month of March. The sum of Rs. 8,930 (rent, Rs. 6,000; removal, &c., Rs. 2,000; Municipal taxes, Rs. 930) may be met from surplus cash balance if it is too late to include it in the Budget for 1894-95. The rent of Rs. 6,000 for 1895-96 will, of course, be budgetted for.—H. A. ACWORTH, Commissioner.

Resolved: "That letter No. 21917, dated 16th instant, from the Commissioner be forwarded to the Corporation, with a recommendation that sanction be given to the leasing by the Commissioner, for a period of two years from the Trustees of the Pinjrapole, of the ground floor of the Pinjrapole Committee's office building for occupancy by stall-holders of the Bhuleshwar Market during the process of pulling down and rebuilding the market on the following terms :—

No. 11015.

"(1) That the rent for the whole of the said ground floor be Rs. 500 per month, free and clear of all Municipal rates and taxes, including water and halalkhor rates, which shall be borne by the Municipality (and which will amount to Rs. 77½ per month); (2) that the stalls for the market be erected by the Municipality and, at the expiration of the lease, be removed at Municipal expense; (3) that the western and the middle walls of the said trustees' building be removed by the trustees and re-erected by them, at the expiration of the lease, at their own expense; and (4) that the trustees at their own expense enclose the western boundary of their building by corrugated iron sheets.

"That the rent (Rs. 500 per mensem) of the premises, the removal, re-erection, and repair of stalls (Rs. 2,000), and Municipal taxes (Rs. 930) for one year, be debited to surplus cash balance."

Considered the following letter No. 10856, dated 25th August 1893, from the Commissioner to the Secretary :—

SIR,—With reference to the item of Rs. 75,000 entered in the Loan Works Budget for 1893 and 1894, page 76, against the head "Further Alteration and Improvement at Malabar Hill Reservoir," I have the honor to submit an estimate for the work of covering the floors of the vaults under the filter with 1" of Indian patent stone and re-pointing the internal walls under the vaults up to the springing of the arches with the same material.

2. The necessity for this work arises from the leakage which undoubtedly now occurs in the area referred to and in the distributing basin, though the exact extent of it is very difficult to ascertain; but it may, I think, be said with confidence that it amounts to not less than 1,20,000 gallons a day.

3. I should with this also have sent up the estimation for covering the floor of the distributing basin, but the question of constructing additional filters within that basin is under consideration, and it would be futile to protect the floor now if it is shortly again disturbed. I hope to submit, in October at latest, proposals for the filtering of the Malabar Hill supply which is so much required.—I have, &c., H. A. ACWORTH, Commissioner.

Estimate of cost of repairs to walls and floors of vaults under filters at Malabar Hill Reservoir.

59,143 square feet flooring, with Indian patent stone 1" thick on floors under filters, including fillet at junction of walls of floor of equivalent area, at Rs. 33 per 100 square feet...	Rs.	17,743	1	0
46,000 square feet re-pointing walls under filters with Indian patent stone, including removing old pointing, at Rs. 41 per 100 square feet	,,	18,860	0	0
	Rs.	36,603	1	0
10 % Contingence and Establishment	,,	3,660	15	0
Total Rs....		40,264	0	0

Considered, also, letter No. 19302, dated 18th December 1893, from the Commissioner to the Secretary :—

SIR,—With reference to Standing Committee's Resolution No. 5017 of 30th August last, I have the honor to forward tabular statements prepared by the Water Engineer showing what has been, and what remains to be, done at the Malabar Hill Reservoir, together with a report from the Executive Engineer summing up the results of the last of the series of experiments which have been undertaken to ascertain the leakage from the distributing basin, including the vaults under the filters. It will be seen that, as I told the Standing Committee in my report No. 10856 of 25th August, there is no doubt as to a leakage of at least 1,20,000 gallons a day. I may add, with reference to the last para. of that report, that the Executive Engineer has now received a communication, which has been long awaited, from Major Tulloch on the subject of polarite, and I hope soon to be able to submit definite proposals for the extension of the filtering accommodation at this reservoir.—I have, &c., H. A. ACWORTH, Commissioner.

Considered, also, letter No. 12695, dated 16th December 1893, to the Commissioner :—

SIR,—With reference to your No. 16500, dated 13th November 1893, I have the honor to report that I have now taken a series of trials with the Water Engineer for two days, with a view to ascertain, as far as practicable, the actual loss of water in the distributing basin at Malabar Hill Reservoir. As anticipated, water was passing out of the outlet pipe, but in a small quantity, although the sluices were carefully shut. The daily quantity of water lost from the distributing Basin, as ascertained by the trials now taken, is 1,20,197 gallons. This accords very nearly with the loss ascertained by the Water Engineer's experiments made in November and December 1892 and falls short by 13,027 gallons of the result obtained by the second experiment made by him in July 1893. There was, however, a remarkable circumstance connected with the trials now taken, which is, that the level of water in filter beds and the distributing basin sank uniformly, which was not the case with those previously taken. It is, therefore, safe to infer with reasonable certainty, *from the uniformity in the sinkage of the water level* during the recent trials, that the loss of water at the rate of 1,20,000 gallons a day is due to leakage from the walls or floors, or both, of the distributing basin. This basin consists of two parts—one underneath the filter beds and another under the moorum roofing. It is not advisable to incur any expenditure in making any protective works for the stoppage of leakage under the latter portion, as, in the event of the proposal to have filtration by alum or through polarite not being carried out, additional sand filter beds will have to be constructed over it—a work which will materially injure the protective works; if it were carried out now. It seems to me, therefore, that it would be advisable to restrict the protective works to that part of the distributing basin which is underneath the filter beds only. After these works are completed, a further trial of the remaining portion of the distributing basin should be taken with a view to find out how much, if any, of the ascertained loss of 1,20,000 gallons per day is due to the leakage through it. If the trial shows that there is no leak through the walls and floor of the basin under the moorum roof, there would be no necessity of carrying out the protective works in that part.

The estimated cost of the protective works for the portion of the distributing basin underneath the existing filter beds alone is Rs. 40,264 as given by the Water Engineer in his No. 2423 W, dated 26th June 1893.—I have, &c., M. C. MURZBAN, Executive Engineer.

Resolved : " That letters No. 10856 and 19302, dated 25th August last and 18th ultimo, with accompaniments, from the Commissioner to the Secretary be forwarded to the Corporation, with the

No. 11016.

recommendation that sanction be given to the expenditure of Rs. 40,264 for the work of covering the floors of the vaults under the filters of the Malabar Hill Reservoir with 1″ of Indian patent stone and repointing the walls up to the springing arches with the same material ; the amount to be debited to the provision of Rs. 75,000 entered in the Loan Works Budget for 1893-94 against the head 'Further alteration and improvements at Malabar Hill Reservoir.'"

No. 11017. *Resolved*: "That, as applied for by the Commissioner in his letter No. 22306, dated 19th instant, the Corporation be recommended to sanction, under section 67 (*b*) of the Municipal Act, the grant of Rs. 160 from surplus cash balance to meet the cost of connecting the Water Engineer's bungalow with the telephone system between Chinchpokli, Sion, Pawai, Ghatkopar and Bhandup."

No. 11018. *Resolved* : "That, as applied for by the Commissioner in his letter No. 22127, dated 18th instant, the Corporation be recommended to sanction the amount of security to be furnished by the Record-keeper of the Chief Accountant's office being fixed at Rs. 2,000."

Considered letter No. 22211, dated 19th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to say that the work of constructing bigarees' chawls at Bori Bunder sanctioned under Corporation resolution No. 12246 of 16th February 1893 cannot be begun until the bigarees at present occupying the old chawls vacate them, and in order to do so, they must be accommodated elsewhere. The Health Officer has with some trouble selected a plot of ground measuring 4,000 square yards belonging to the Port Trust between Cambay and Bassein Streets, and this the Port Trust are willing to lease to us for Rs. 504 per mensem. The buildings to be erected on it, and which will be removed at the end of the tenancy, will cost Rs. 3,268 as per details in the margin and estimates attached. Rs. 370 could be saved by putting cadjan roofs to the chawls, but the Corporation will agree with me that this is out of the question. The ground will be required probably for 15 months. I beg to request that early sanction may be given to this arrangement (the only one that seems possible), the cost of the buildings and rent from date of sanction being debited to surplus cash balance.

Chawl for	H. D. Bigarees	..	Rs.	1,850
Market	do. do.	..	„	550
Privies	do. do.	..	„	730
Water-stand pipe	do.	..	„	138

Surplus cash balance statement reserved in the budget estimate for 1894-95 for probable extra grants up to the end of 1893-94, Rs. 1,28,650 out of which have been already sanctioned, excluding temporary advances to be adjusted hereafter.

Payments to the extent of	Rs.	22,676	0 0
Recommended for sanction	„	1,00,072	5 5
	Rs.	1,22,748	5 5
Available balance	„	5,901	10 7
	Rs.	1,28,650	0 0

have, &c.—H. A. ACWORTH, Commissioner.

No. 11019. *Resolved* : " That letter No. 22211, dated 19th instant, from the Commissioner to the Secretary, be forwarded to the Corporation with a recommendation that sanction be given (1) to the leasing from the Port Trust of 4,000 square yards or thereabout of land situate between Cambay and Bassein Streets, for a period of about 15 months at a rental of Rs. 504 per mensem, for the construction thereon of a temporary chawl for bigarees of the Health Department, pending the building of their chawl at Bori Bunder as sanctioned by the Corporation's resolution No. 12246 of 16th February 1893 ; (2) to the construction of the temporary chawls at a cost of Rs. 3,268 as per details submitted with the letter. This amount, together with the rent of the land for the first month, being debitable to surplus cash balance."

No. 11020. *Resolved* : " That the following be *recorded* :—Memorandum No. 22327, dated 20th instant, from the Commissioner, reporting that no house or portion of a house fell during the month of December last."

No. 11021. *Resolved* : " That the following be printed and brought on for consideration next week :—Memorandum No. 22429, dated 22nd instant, from the Commissioner, forwarding return of receipts and disbursements for the quarter ending 29th December 1893."

No. 11022. *Resolved* : " That the following be *recorded* :—Memorandum No. 22324, dated 20th instant, from the Commissioner, reporting, with reference to the Committee's resolution No. 5620, dated 9th January 1889, the following transfers :—On 12th January 1894, from the Surplus Cash Deposit Account to the Municipal Loans Sinking Fund Deposit Account 5 per cent. Muni-

cipal debentures for Rs. 1,33,000, 4 per cent. Municipal debentures for Rs. 8,000 ; from the Surplus Cash Deposit Account to the Worn-out Mains Renewal Fund Deposit Account, Rs. 500."*

Resolved : " That the following be laid on the table :—

No. 11023. Letter, dated 20th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of December last and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statements of their scrutiny of accounts."

Read letter No. 22610, dated 23rd instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to report that tenders for hay and grain having been twice invited, the final results are as below :—

HEALTH DEPARTMENT INCLUDING FIRE BRIGADE AND VICTORIA GARDENS.

Hay and Grass.

	Rs.	a.	p.
Framji Dorabji and Damodar Mayachand ...	1,08,150	13	3
Bhojabhoy Allarakhia	1,09,133	11	5
Ratanji Bapubhai...	1,18,449	15	5

Oorced, Gram, Bran, &c.

	Rs.	a.	p.
Framji Dorabji	1,51,448	8	5
Bhojabhoy Allarakhia	1,53,314	1	3
Ratanji Bapubhai...	1,54,199	13	9
Oomar Jamal and Ruttonsi Pranjee	1,56,771	6	3
Sorabji N. Moosa	1,58,799	6	6
Hormasji Jehangir & Co...	1,61,349	1	4

BANDORA SLAUGHTER HOUSE.

Hay, &c.,

	Rs.	a.	p.
Framji Dorabji and Damodar Mayachand ...	22,258	5	4
Bhojabhoy Allarakhia	22,577	3	4
Ratanji Bapubhai	25,139	9	10
H. R. Brewin	24,177	4	7

Under Health Department for hay and grass the lowest tender is that of Framji Dorabji and Damodar Mayachand's, which is

* The Chief Accountant reports to the Commissioner that the balance standing to the credit of the above deposit account, after effecting the transfers now reported, stands as under :—

In 5 per cent. Municipal Debentures for	Rs. 24,00,500	= Rs.	24,00,500	0 0
„ 4 per cent. do.	„ 78,000	= „	78,000	0 0
„ 4 per cent. Government Paper for	„ 93,500	= „	98,467	3 0
		Rs.	25,76,967	3 0
In Cash		„	13,677	10 0
		Rs.	25,90,644	13 0

Rs. 982-14-2 lower than that of the next tender, Bhojabhoy Allarakhia's, on a tender of rather over one lakh in value. Under the same department the lowest tender for grain is that of Framji Dorabji's, which is Rs. 1,865-8-10 below that of the next tenderer, Bhojabhoy Allarakhia. Ooreed is by far the most important constituent item in this tender, the value of the ooreed in Framjee Dorabji's tender being Rs. 1,43,865-2-3 out of a total of Rs. 1,51,448-8-5. Under the head "Bandora Slaughter-houses" Framji Dorabji and Damodar Mayachand are again the lowest tenderers, being Rs. 318-14-0 below Bhojabhoy Allarakhia, on a tender of about Rs. 22,000. Over the totality of all the tenders therefore Framji Dorabji either by himself or in partnership with Damodar Mayachand are the lowest tenderers by Rs. 3,167-5-0 on a value in round figures of Rs. 2,80,000. In forwarding his tenders, Mr. Framji Dorabji wrote to me that, in the absence of samples of hay and straw such as were fixed for hay and grain, he had submitted samples which might or might not be approved and suggested that samples for comparison might be selected by the Health Officer from the quality now in daily use. The Health Officer remarked on this that the statement was a misleading one, the tender calling for hay of first quality. He added that Mr. Framji Dorabji's statement seemed to indicate difficulty in the future. The Health Officer again wrote to me yesterday, and I forward a copy of his letter. Bhojabhoy Allarakhia are the present contractors both for hay and grain and have done their work very well; the small difference, only just over 1 per cent., between their tenders and those of the lowest contractors is not in my opinion sufficient to outweigh the risk of taking the contract from them and giving it to an unknown person or firm, and I therefore recommend the tenders of Bhojabhoy Allarakhia for acceptance, provided they reduce them to the figures of the lowest tenderer.—H. A. ACWORTH, Commissioner.

No. 30857 OF 1893-94.

BOMBAY, 22*nd January* 1894.

To THE MUNICIPAL COMMISSIONER.

SIR,—With reference to the tenders for hay, grain, &c., I would venture to draw your attention to the little difference between the tendered rates for hay of the present contractor, Mr. Bhojabhoy Allarakhia, and the tender of Messrs. Framji Dorabji and Damodar Mayachand. The total difference for hay between the present contractor and Messrs. Framji Dorabji and Damodar Mayachund is only Rs. 983; this sum of Rs. 983 is a mere nothing when it is considered that hay has to be supplied every day and that, if it is not, the consequences will be very serious, and that the lowest tenderers, Messrs. Framji Dorabji and Damodar Mayachund, are a new firm of tenderers and have had no experience of the work. I think the small difference of Rs. 983 should be considered and the opportunity given to the old contractor for reducing his rates. The old

contractor has had experience, which is worth a very great deal, and in the crisis during the last year he did excellent service. He had always supplied first-rate hay and grain.

The difference in the rates for ooreed of Mr. Framji Dorabji and Messrs. Bhojabhoy Allarakhia & Co. is only Rs. 1,866. I say *little* about ooreed, but I would recall your attention to the fact that two years ago, when the contractors systematically supplied bad or inferior ooreed we could practically do nothing. The contractor was frequently fined, but he continued supplying inferior ooreed to the injury of the bullocks. The quantities of the other articles to be supplied, such as grain, bran, salt, &c., are very small, and the expenditure compared with hay and ooreed is trifling.

T. S. WEIR, Health Officer.

Proposed by E. B. Carroll, Esq.; seconded by Hurkisondas Nurrotumdas, Esq.—

No. 11024. "That, as applied for by the Commissioner in his letter No. 22610, dated 23rd instant, sanction be given to the acceptance of the tender of Mr. Bhojabhoy Allarakhia for the supply of hay, grain, &c., during 1894-95 at the following rates, provided he accepts the rates tendered by the lowest tenderer, Mr. Framji Dorabji, which are as follows :—

Public Health Department including Fire Brigade, Victoria Gardens, etc.

	Rs.	a.	p.	
Hay	8	14	0	per 1,000 lbs.
Green grass	4	8	0	do.
Rice straw	6	8	0	do.
Ooreed	34	12	0	do.
Gram	33	0	0	do.
Bran	20	0	0	do.
Oil-cake	45	0	0	do.
Salt	50	0	0	do.
Barley	25	0	0	do.
Matra	20	0	0	do.
Rice	50	0	0	do.

Bandora Slaughter-house.

	Rs.	a.	p.	
Hay	8	7	0	per 1000 lbs.
Rice straw	5	12	0	do.
Green grass	3	12	0	do.

Carried (with two dissentients).

No. 11025. *Resolved* : "That, as applied for by the Commissioner in his letter No. 22478, dated 22nd instant, sanction be given to a contract with Messrs. Richardson and Cruddas for the supply of certain special castings required for the connections between the Tansa and Vehar water mains at Chinchpokli at schedule rates aggregating Rs. 6,570-15-0. That, under the terms of

section 72 (3) of the Municipal Act III of 1888, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as the castings are urgently required, and as the Commissioner states that the current year's contractors, Messrs. Rustomjee Pestonjee Master & Co. and Messrs. Gahagan & Co., are unable to supply these castings."

The seal of the Corporation was then affixed to the said contract.

Considered letter No. 22465, dated 22nd instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honor to request sanction to the expenditure of Rs. 295 out of the grant for House Connections, 1st Drainage Section, to connect the house of Mr. Shantaram Narayan Dabholkar, 17, Kalbadevi Road, with the Municipal sewers. Last year Mr. Shantaram was directed by the Drainage Engineer to remove his nahanis from the centre of the house, whence they discharged into an old masonry drain under the house to the sides of the house. He did this, but they have now no connection, and he wishes to have them connected on the system hitherto pursued. His house is in the 1st drainage section, and he seems, under the circumstances, entitled to a compliance with his request.—I have, &c., H. A. ACWORTH, Commissioner.

No. 11026. *Resolved* : " That, as applied for by the Commissioner in his letter No. 22465, dated 22nd instant, the Corporation be recommended to sanction the expenditure of Rs. 295 out of the grant for House Connections, 1st Drainage Section, to meet the cost of connecting the house of Mr. Shantaram Narayan Dabholkar, 17, Kalbadevi Road, with the Municipal sewer."

No. 11027. *Resolved* : " That letter No. 22469, dated 22nd instant, from the Commissioner be forwarded to the Corporation with reference to petition from Messrs. J. Hendricks, W. M. Thomas, and other residents of Peerbhoy's Buildings, Foras Road, complaining of nuisances thereat."

No. 11028. *Resolved* : " That, as applied for by the Commissioner in his letter No. 22480, dated 22nd instant, the Committee approve, under section 91 of the Municipal Act, of his applying to Government for the taking up, under the Land Acquisition Act, of the portion of well on the northern side of Gowalia Tank Road shown in yellow on the tracing (marked " A, " dated this

day and filed in supplement to Minute Books), as such portion is an obstruction to the road and should be added to the thoroughfare."

It was agreed that the consideration of the following be postponed :—Memorandum No. 18495, dated 8th instant, from the Commissioner, forwarding letter from the Chief Accountant reporting that he has adjusted the stock accounts of the different departments of the Municipality for the year ending 31st March 1893, and requesting sanction of the Standing Committee and the Corporation to the writing off of Rs. 1,04,540-4-0 as book loss by auction, &c., sale of unserviceable and other stores as per detailed statements submitted.

No. 11029.

Proposed by Bhalchandra K. Bhatawadekar, Esq., seconded by A. G. Viegas, Esq.—

"That a sub-committee consisting of the following gentlemen be appointed to examine into, and report on, the question of writing off of the value of stock from year to year and to make suggestions as to the best means of providing in the accounts for the depreciation of stock and plant of all kinds :—Mr. Carroll, the Hon'ble Mr. Javerilal U. Yajnik, Mr. Shroff, and Mr. Viegas."

No. 11030.

Carried.

Resolved : "That the following be *recorded* :—Letter No. 22524, dated 22nd instant, from the Commissioner, reporting, as required by section 69 (*d*) of the Municipal Act, that he has ordered stores of the value of Rs. 1,187-14-2 to be purchased for the Homeless Leper Asylum from the Medical Stores Department."

No. 11031.

The following returns were read and *recorded* :—

Return of fires at Dongree Street (Oomercarry), Fergusson Road (Britannia Mill), Chinch Bunder Road, 232 Cazi Street (Paidhowny), 366 Jinjikar Street (Dongree), Carnac Road, No. 6 First Carnac Road Cross Lane, Nos. 12, 13, 14, 15, 16 Lohar Chawl and Chinch Bunder Road, forwarded with the Commissioner's memoranda Nos. 21810 and 22549, dated 16th and 22nd January 1894.*

No. 11032.

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* *See* Appendix C.

Proposed by Kaikhosro N. Kabraji, Esq., seconded by A. G. Viegas, Esq.—

"That, in recording this return, the Standing Committee places on record its high approval of the valuable and efficient services of the Fire Brigade at the recent extensive fires."

Carried.

The following statement * was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 21st January 1894.

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 22665, dated this day, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 2,450 from savings in the grant for A, Victoria Gardens, section II, feed of animals, to section II, contingencies, to meet excess on the latter head due to the purchase of medicines, instruments and appliances for the treatment of the animals at the gardens and for the purchase of hose and garden implements."

No. 11033.

Resolved : "That the following be *recorded* :—Letter No. 22655, dated this day, from the Commissioner reporting that he has accepted (1) the tender of Messrs. Dewji Canji and Co., amounting to Rs. 666, for the work of furnishing and fitting up the room for Councillors on the ground floor of the Municipal Offices, (2) the tender of Mr. Devram Keshowji, amounting to Rs. 1,260-7-10, for enclosing with teakwood windows and Porebunder work the verandahs on the west side of the Municipal Offices."

No. 11034.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 22584, dated 23rd instant, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 600 from savings in the Health Department Budget, conservancy branch, II, labour, B, surface drain cleaning, to Municipal Commissioner's office establishment, section III, contingencies, &c., and printing to meet excess on the latter head."

No. 11035.

* *See* Appendix **B**.

Resolved : "That, as applied for by the Commissioner in his letter No. 22608, dated 23rd instant, the Committee approve, under section 381 of the Municipal Act, of a notice in writing being served upon Mr. Nanabhai Framji Spencer requiring him to fill in the hole belonging to him at Naigam Cross Road with sweet earth to the level of the surrounding ground, as complaints have been received as to the nuisance caused by the stagnation of water in the hole."

No. 11036.

Resolved : "That, as applied for by the Commissioner in his letter No. 22607, dated 23rd instant, sanction be given to the purchase by him from Messrs. Dadabhoy Hormusji & Co. of 250 tons of Cardiff coal at Rs. 19-8-0 per ton and 250 tons of West Hartley coal at Rs. 17-4-0 per ton to be delivered at Love Grove at the end of February and beginning of March next. The cost to be met from next year's budget grant.

No. 11037.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as similar arrangements previously sanctioned by the Committee have been advantageous to the Municipality."

BOMBAY, *31st January* 1894.

AT the meeting of the Standing Committee held this day, there were present :

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E.; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
The WATER ENGINEER ; and the SECRETARY.

The minutes of the meeting held on the 24th instant, were signed.

The seal of the Corporation was affixed to the deed of contract with Messrs. Brooks & Co. for the supply of 300 tons of Bengal Sanctoria Coal.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 23302, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 11475.

Resolved: "That, as applied for by the Commissioner in his letter No. 22788, dated 25th instant, sanction be given, under sections 211 and 517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes, against Mr. F. B. Stuart, for the recovery of Rs. 27-8-0, being the amount of wheel tax and notice fee due as per statement submitted with the letter."

No. 11476.

Resolved: "That the following be *recorded*:—Letter No. 22892, dated 26th instant, from the Commissioner, reporting that he has sanctioned the continuance of the lease for one year, from 1st March next, of the stable at Kamathipura 2nd Street, occupied by the Health Department and belonging to Mr. Pohchaty bin Phochaya Singal, at Rs. 50 per mensem, the Municipality paying water and halalkhor taxes."

No. 11477.

Resolved: "That the consideration of the following be postponed:—Letter No. 22779, dated 25th instant, from the Commissioner, reporting, under section 69 (*d*) of the Municipal Act, that he has sanctioned the purchase, from Mr. Dossabhai Framjee Cowasjee Dubash, Contractor for the Homeless Leper Asylum, of articles for the use of the asylum, as per list submitted, amounting to Rs. 3,000.

No. 11478.

"That the Commissioner be asked to inform the Standing Committee as to whether the Leper Asylum is a Municipal Institution."

Read the following:—

BOMBAY, 29*th January* 1894.

To THE CHAIRMAN of the Standing Committee

Sir,—At the request of the House Connections Committee, I have the honor to ask that you will move the Standing Committee to recommend to Corporation to make a grant of Rs. 3,000 to be paid in honoraria to Messrs. D. Gostling, J. Hewson and J. Wallace, Civil Engineers, for their valuable services to that Committee.—I have, &c., JAVERILAL U. YAJNIK, Chairman, House Connections Committee.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That, with reference to letter, dated 29th instant, from the Chairman, House Connections Committee, the Corporation be recommended to make a grant of Rs. 3,000 from the unappropriated balance of the loan for 1st Drainage

Section, House Connections, for payment to Messrs. D. Gostling, J. Hewson and J. Wallace, Civil Engineers, for their valuable services to the Committee."

On a division, the proposition was *lost*, the votes being 2 *for* the motion and 7 *against* it.

Considered the following :—

No. 3794 OF 1893-94.

BOMBAY, 19*th January* 1894.

TO THE COMMISSIONER.

SIR,—I have the honor to forward, for transmission to the Standing Committee, a return for the quarter ending 29th December 1893, as compared with the corresponding quarter for the previous year, as required by the then Town Council's Resolution No. 465, dated 1st June 1887, with a list of additional grants sanctioned by the Corporation during the quarter.

2. The unappropriated surplus cash balance, as pointed out in my annual report for the past year, amounts to Rs.7,75,000 excluding 3½ lakhs of lapsed grants for the past and previous years renewed by the Standing Committee and Rs. 2½ lakhs reserved for Victoria Garden improvements.

3. Surplus revenue of Rs. 65,836 and savings in the expenditure, amounting to Rs. 1,00,000, for the current year were anticipated while submitting to the Corporation the Budget Estimates for 1894-95.

4. Out of the surplus, &c., referred to in paras. 2 and 3, the Standing Committee have reserved (1) Rs. 2,46,168 for additional grants sanctioned and to be sanctioned during 1893-94; (2) Rs.60,000 for anticipated falling off in the current year's Water Works revenue; and (3) Rs. 1,70,000 for the estimated deficit between the income and expenditure for 1894-95. The balance of the surplus, &c., has helped to swell the surplus balance to over Rs. 16¾ lakhs.

5. As per the revised estimates circulated to the members of the Corporation, a further surplus of over a lakh of rupees has accrued (¾ths of a lakh on account of surplus revenue and over a quarter of a lakh of savings in expenditure).—I have, &c.,

SORABJI NAVAROJI COOPER,
Chief Accountant.

ACCOUNT OF THE BOMBAY MUNICIPALITY FOR CONTRASTED WITH THAT FOR THE

	Budget Estimate.	Quarter ending 30th December 1892.	Quarter ending 29th December 1893.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Opening Balance	16,00,000 0 0	59,598 10 0	2,54,835 9 5
General Tax	17,97,596 0 0	7,64,747 10 6	6,26,169 13 6
Water Tax (including other Miscellaneous Revenue)...	13,25,000 0 0	3,44,744 2 6	3,02,134 15 8
Wheel Tax and Tolls ...	3,28,324 0 0	41,364 15 11	45,830 10 7
Halalkhor Tax	5,74,000 0 0	1,93,626 5 4	1,90,146 0 5
Duties, Town...	9,00,000 0 0	3,36,585 5 2	2,79,396 15 10
Licenses	76,850 0 0	14,893 8 0	16,740 8 0
Liquor Licenses, Instalment paid by Govt. in lieu of, under B, Act V of 1878 ...	1,43,750 0 0	.....	.....
Tobacco Duty (under Act IV of 1857)	1,82,000 0 0	40,693 0 0	39,855 0 0
Market Receipts	3,61,000 0 0	86,973 3 2	92,843 1 4
Miscellaneous Fees	40,300 0 0	15,024 8 11	12,218 13 5
„ Fines and Penalties...	7,000 0 0	3,488 12 3	1,899 0 0
„ Receipts ...	1,20,000 0 0	31,576 8 6	29,218 11 0
„ Savings ...	2,000 0 0	.....	.....
Public Gardens	6,700 0 0	2,216 4 0	1,502 13 0
Contribution from Municipal servants towards Pension, &c., Fund	15,300 0 0	3,980 2 7	4,035 13 8
Tramway Rent	36,200 0 0	18,096 1 11	18,980 7 11
Premia on the 4 per cent. Loan for repayment of the Govt. consolidated Loan	.....	.....	† 686 2 0
Interest and Profit on Investments	2,29,800 0 0	1,70,297 1 9	1,06,702 5 4
Premium on the 2nd instalment of 2 Lakhs of the 4½ Lakhs Loan for FireBrigade Quarters and Stations ...	.....	.....	3,242 0 0
	61,45,820 0 0	20,68,307 10 6	17,70,230 15 8
Debt	.....	2,50,000 0 0	2,00,000 0 0
Bank of Bombay Loan and other Deposit Accounts ...	.....	15,64,290 4 5	11,08,155 1 4
Workshop Recoveries ...	.....	26,294 10 2	14,444 12 4
Advances	.....	77,094 7 3	84,484 8 2
Deposits	.....	4,52,708 12 7	1,12,472 15 8
Rupees ...	61,45,820 0 0	44,38,695 12 11	32,89,788 5 2
Total Rupees...	77,45,820 0 0	44,98,294 6 11	35,44,623 14 7

† Debit deducted.

THE QUARTER ENDING 29TH DECEMBER 1893 AS QUARTER ENDING 30TH DECEMBER 1892.

	Budget Estimate.	Quarter ending 30th December 1892.	Quarter ending 29th December 1893.
DISBURSEMENTS	Rs. a. p.	Rs. a. p.	Rs. a. p.
Superintendence	1,98,156 0 0	42,368 3 10	51,987 10 2
Assessment and Collection Department	2,51,060 0 0	61,286 11 0	58,144 5 3
Fire Brigade...	1,11,515 0 0	21,724 4 11	30,447 1 0
Public Gardens	80,147 0 0	15,776 8 6	12,676 3 9
Public Works Engineer's Dept. — General Supervision Estabt.	40,924 0 0	9,737 6 4	9,173 0 2
Public Works Engineer's Dept. — Drainage	1,96,991 0 0	45,761 8 3	45,401 3 11
Public Works Engineer's Dept. — Water Works	2,99,924 0 0	38,038 11 3	52,086 1 3
Public Works Engineer's Dept. — Streets and Buildings Inspection and Supervision Estabt. ...	87,917 0 0	20,382 7 10	20,272 3 10
Public Works Engineer's Dept. — Public Lighting ...	3,21,410 0 0	77,755 10 11	1,04,123 8 3
Public Works Engineer's Dept. — Road Watering... ...	77,744 0 0	12,387 5 4	9,654 0 11
Public Works Engineer's Dept. — Road Repairs and Maintenance...	4,08,419 0 0	1,03,452 3 8	99,922 10 9
Public Works Engineer's Dept. — Street Improvements ...	1,01,000 0 0	29,210 10 10	27,404 5 4
Public Works Engineer's Dept. — Cleaning, Lighting and Repairing Port Trust Wharves	38,842 0 0	37,642 0 0	.....
Health Department... ...	13,92,200 0 0	3,21,255 3 11	2,99,920 8 4
Police Charges	3,63,345 0 0	64,571 5 9	90,836 4 0
Education	91,032 0 0	20,823 8 8	21,376 3 6
Hospitals	60,108 0 0	9,357 2 1	10,039 14 0
Miscellaneous	55,050 0 0	26,324 15 9	13,942 13 11
New Works	81,292 0 0	51,214 6 8	23,640 10 2
Debt (including Sinking Fund deposited with the Bank of Bombay)... ...	21,73,412 0 0	4,74,293 0 8	4,69,533 7 11
	64,30,488 0 0	14,83,363 8 2	14,70,582 4 5
Loan Works Accounts ...	.....	2,41,095 6 4	3,23,504 6 7
Bank of Bombay Loan and other Deposit Accounts ...	.....	13,53,855 13 9	11,83,998 6 6
Workshops	.....	25,317 1 6	15,562 9 1
Advances	.....	78,963 8 11	1,59,516 3 1
Deposits	.....	3,99,927 5 8	78,826 10 4
Rupees...	64,30,488 0 0	35,82,522 12 4	32,31,990 8 0
Closing Balance ...	.....	9,15,771 10 7	3,12,633 6 7
Estimated Balance on 31st March 1894...	13,15,332 0 0	.....	.....
Total Rupees...	77,45,820 0 0	44,98,294 6 11	35,44,623 14 7

List of Additional Grants sanctioned by the Corporation for the Quarter ending 31st December 1893.

Reso. No.	Date of Resolution.	Nature of Work.	Amount. Rs. a. p.
	1893.		
6606	October 12 ...	Grant of Rs. 1,725 from surplus cash balance to meet the cost of (1) erecting a rough ramp to prevent the access of the tide to reclaimed ground on the foreshore at Wodehouse Bridge, and (2) of covering the reclamation thereat with sweet earth	1,725 0 0
6607	„ „ ...	Grant of Rs. 373-4-6 from surplus cash balance to meet the cost of acting allowance due to Mr. Cardoze, now an Engineer in the Fire Brigade, as foreman fitter, Municipal Workshops, from 26th October 1891 to 6th May 1893...	373 4 6
6608	„ „ ...	Grant of Rs. 304 from surplus cash balance to meet the cost of extra printing charges (Corporation and Standing Committee's Establishment) incurred by order of the Corporation and the Committee, *viz.*, correspondence regarding (1) the squatting of shoe-dealers, (2) the contract for the supply of stoneware pipes for Colaba Drainage, (3) draft by-laws framed under section 461 of the Act, and (4) papers relating to criticism of Government on the account system of the Municipality ...	304 0 0
723	„ 16 ...	Grant of Rs. 25,300 from surplus cash balance for the acquisition of 977 square yards or thereabout of land belonging to the family of late Mr. Jijibhoy Dadabhoy in Bora Bazar Street	25,300 0 0
7604	November 6 ...	Grant of £95 from surplus cash balance to meet the cost of a 5″ quadruple-acting donkey pump, with a capacity of about 7,500 gallons, required for the Love Grove Pumping Station, especially for the more rapid charging of water to the pumps ...	1,520 0 0
7834	„ 18 ...	Grant of Rs. 18,188 from surplus cash balance to meet the cost of (1) improving the Matharpacadi Road from Mount Road to Gunpowder Road by the purchase of the whole of the buildings marked No. 1 and the two sheds marked 2 and 3, the purchase of the ground coloured red occupied by these buildings, and of the unoccupied land coloured in blue as shown on the tracing marked A, dated this day and filed in supplement to minute books; (2) raising the grade of the road from Mount Road to Gunpowder Road at a cost of Rs. 13,357; (3) improving the grade of the roadway from Matharpacady Cross Lane (c to d) on the same tracing and widening the road near Rose Cottage Lane as shown by the part coloured green, which is unoccupied land and should be required under the provision of section 299 of the Municipal Act, Rs. 4,831	18,188 0 0
		Carried forward ...	47,410 4 6

Reso. No.	Date of Resolution.	Nature of Work.	Amount.
	1893.		Rs. a. p.
		Brought over ...	47,410 4 6
7841	November 13 ...	Grant of Rs. 868 from surplus cash balance to meet the cost of the following extra works in connection with the night-soil collection depôt at Colaba :—(1) the erection of a fence on the railway ground at the end of Thomas Street, (2) the construction of a road with packing, (3) the construction of a catchpit and an iron gateway, (4) the laying of a small length of drain for a water standpipe, and (5) the erection of a sewage pump ...	868 0 0
9223	December 11 ...	Grant of Rs. 600 from surplus cash balance to meet the cost of Mr. Hari Dwarkaji's claims against the Municipality in connection with the demolition of his property situate in Bhoiwada, Parel	600 0 0
		Total Rs.*...	48,878 4 6

* Excluding Rs. 61,200 sanctioned in Corporation's Resolution No. 8968, dated 7th December 1893, to be temporarily met from surplus cash balance or loan fund balances, to provide for the payment of the full monthly instalments of the Vehar debt, pending receipt of the Viceroy's sanction to a short Act being passed when the excess payments are to be refunded to the Municipality.

MEMORANDUM No. 22429 OF 1893-94.

BOMBAY, 22*nd January* 1894.

TO THE MUNICIPAL SECRETARY.

Forwarded to the Standing Committee for information.

H. A. ACWORTH, Commissioner.

Resolved : "That memorandum No. 22429, dated 22nd instant, from the Commissioner, and returns forwarded therewith, be *recorded*."

No. 11479.

The consideration of the following was postponed till next week :—Memorandum No. 17338, dated 23rd November 1893, from the Commissioner, on the subject of the projection of Mr. Dosa Jiwan's building in Lohar Chawl Street.

Read the following :—

BOMBAY, 25*th January* 1894.

TO THE CHAIRMAN, Standing Committee, Bombay.

SIR,—I beg to enclose herein copy of the letter I have addressed to the Municipal Commissioner of the city, from which you will kindly note that I have made further reductions in the rates tendered by me for the supply of grass and grain, and I trust,

in the interest of the municipality, you will please take such action as may appear to you necessary.—I remain, &c., FRAMJEE DORABJEE GHASWALA.

Letter, dated 25th instant, to the Commissioner :—

SIR,—Referring to the papers of this morning I was not a little surprised to learn that preference is given to the present Contractor to supply grain and grass, provided he accepts the rates tendered by me. I had no reason to suppose that the usual practice of accepting lowest tender from a qualified man would not be adhered to except wholly in this case, or such an irregular proceeding allowed. I was fully convinced of justice at your hands. When I was told that the Commissioner (your goodself) recommends the acceptance of my tender, provided I would reduce my rate for the supply of salt. I acceded and have altered the rate from 50 to 41 per 1,000 lbs. ; this change will be found in my tender.

I am grieved to find you, Sir, to change your opinion at the eleventh hour, and I have no hesitation to say that I know almost all the members of the Civil Service who have either passed or served in Poona District, and no member of this distinguished service is known, without sufficient reason, to alter their opinion suddenly ; especially as in my case it cannot be said that I am not capable to carry out the contracts. The credentials submitted with my letter, dated 14th December 1893, will satisfactorily show the mannerI have carried important Government contracts. I have also pointed out that having experience, I would make certain proposals which would secure bullocks at a cheaper rate and diminish the present mortality among the animals. However, since the Municipality allow rates to be modified after the tenders are opened, I now, in the interest of the Municipality, beg to reduce my rates as follows :— Grass from Rs. 8-14 to Rs. 8-12-0 per 1,000 lbs. ; Grain of all kinds, 4 as. per 1,000 lbs. less.

I respectfully beg the favour of you placing this letter together with all the credentials submitted on the 14th ultimo for the consideration of the Standing Committee with such favourable recommendation as you may consider fit.—I remain, &c., FRAMJEE DORABJEE GHASWALA.

Resolved : " That letter, dated 25th instant, from Mr. Framjee Dorabjee Ghaswala to the Chairman, and accompaniment, be *recorded.*"

No. 11480.

Read the following with reference to the fall of stable at Ripon Road, the property of Abdul Razack bin Curtas :—

No. 14304 OF 1893-94.

BOMBAY, 22*nd January* 1894.

TO THE COMMISSIONER.

From the inquiries made by me it appears that the building in question was an open stable and that proposals for its construction

were submitted with the usual building application and plans, but they were conditionally disapproved by this department on 21st June 1892 when the Building By-laws were not in force. It appears also that the posts were not in single lengths, but were jointed, and the fall of the stable was due to the failure of some of these joints, which were probably badly made. I may point out that, under Building By-law No. 29, the owners of buildings are made responsible that all the materials are sound and are of good quality, and that they are properly put together so as to ensure safety. I am informed that the inferior workmanship of the building was not noticed by the building inspector. Had it come to his knowledge, action would have been taken by this department under section 35¼ of the Act. The inspector can only pay occasional visits to private buildings in progress, as he has many other equally important duties to perform.

M. C. MURZBAN, Executive Engineer.

No. 22774 OF *25th January* 1894.

Copy forwarded to the Municipal Secretary in reference to the resolution of the Standing Committee, No. 9655, of 27th December 1893.

H. A. ACWORTH, Commissioner.

No. 11481. *Resolved*: "That memorandum No. 22774, dated 25th instant, from the Commissioner to the Secretary, be *recorded*."

The consideration of the following was postponed till next week :—Letter No. 23114, dated 29th instant, from the Commissioner, reporting that one Mr. Bapujee Jamsetjee Nazir is cultivating rice on a small plot of Municipal ground adjoining the Tansa pipe line at Kapur Bavri, Thana, and although requested by the Water Engineer to desist from doing so, has not complied with the request. Asking sanction to a suit being filed against the party for encroachment."

No. 11482. *Resolved* : "That the following be *recorded* :—Memorandum No. 22572, dated 23rd instant, from the Commissioner, reporting, with reference to the Committee's resolution No. 4484, dated 3rd October 1888, the following transfers to the Municipal General Fund Pass Book :—On 18th January 1894 from (*a*) the Surplus Cash Deposit Account, Rs. 13,677-10-0 ; (*b*) the Municipal Building Loan Deposit Account, Rs. 3,570-8-0 ; (*c*) the Municipal Loans Sinking Fund Deposit Account,

Rs. 1,41,000 ; (*d*) the Worn-out Mains Renewal Fund Deposit Account, Rs. 500 ; and on the 19th idem (*e*) from the net premia, &c., on different Municipal Loans Deposit Account, Rs. 1,44,000. Also reporting, with reference to the Committee's resolution No. 5620, dated 9th January 1889, the following transfer on the 18th instant :— (*a*) from the Surplus Cash Deposit Account, to the net premia, &c., on different Municipal Loans Deposit Account 5 per cent. Municipal Debentures for Rs. 1,44,000.*

Resolved : "That the following be referred to the Commissioner for favour of remarks :—Memorandum from the Municipal Secretary, forwarding petition, dated 27th instant, addressed to the President and members of the Corporation by Chapsee Bhimjee Thakar, Sorabjee Hormusjee and other firewood merchants of Bombay, protesting against draft By-Laws 45 and 47 regarding the storing and stacking of wood."

No. 11483.

Resolved : "That the following be *recorded* :—Memorandum No. 23077, dated 29th instant, from the Commissioner, forwarding, as asked for by the Standing Committee in their resolution No. 10597,

No. 11484.

* The Chief Accountant reports to the Commissioner that the balances remaining to the credit of the above deposit accounts, after effecting the transfers now reported, stands as under :—

(*a*)	In 5 per cent. Municipal Debentures for	Rs.	22,56,500 =	Rs.	22,56,500 0 0
	„ 4 per cent. do.	„	78,000 =	„	78,000 0 0
	„ 4 per cent. Government Paper for ...	„	93,500 =	„	98,467 3 0
				Rs.	24,32,967 3 0
(*b*)	In 5 per cent. Municipal Debentures for			Rs.	1,43,000 0 0
(*c*)	In 5 per cent. Municipal Debentures for	Rs.	8,13,500 =	Rs.	8,13,500 0 0
	„ 4 per cent. do.	„	8,000 =	„	8,000 0 0
	„ Cash			„	114 2 0
				Rs.	8,21,614 2 0
(*d*)	In 5 per cent. Municipal Debentures for	Rs.	1,00,000 =	Rs.	1,00,000 0 0
	„ 4 per cent. do.	„	2,500 =	„	2,500 0 0
	„ Cash			„	39 4 4
				Rs.	1,02,539 4 4
(*e*)	In 5 per cent. Municipal Debentures for	Rs.	1,44,000 =	Rs.	1,44,000 0 0
	„ Cash...			„	188 13 8
				Rs.	1,44,188 13 8

dated 17th idem, further analyses of water, furnished by the Health Officer, as under :—

Sample of unfiltered Tulsi water obtained from the inlet well of the Malabar Hill Reservoir on the 26th January 1894.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·12

Sample of partly filtered Tulsi water taken from the distributing tank of the Malabar Hill Reservoir on the 26th January 1894.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·10

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 25th January 1894.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·11

Sample of filtered Vehar water obtained from the filter channel of the Bhandarwada Reservoir on the 25th January 1894.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·08

Sample of water from Vehar Filters.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·08

Sample of Tansa water drawn from a hydrant on 27" Main in Arthur Road on the 26th January 1894.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·08 "

The following return was read and *recorded* :—

No. 11485. Return of fires at Middle Colaba, No. 10, Bhuleshwar Road, forwarded with the Commissioner's memorandum No. 23033, dated 27th January 1894.*

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 28th January 1894.

* See Appendix C. † *See* Appendix B.

The consideration of the following items was postponed till next week :—

I. Letter No. 23189, dated 30th instant, from the Commissioner, on the subject of the opening of Cavelwadi.

II. Letter No. 23202, dated 30th instant, from the Commissioner on the subject of alteration and improvement of electric light fittings of the Municipal offices.

III. Letter No. 23203, dated 30th instant, from the Commissioner, on the subject of filling in of the Mustan Tank.

BOMBAY, *7th February* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq. ; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq ; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 31st ultimo were signed.

The seal of the Corporation was affixed to the deed of contract with Messrs. Heptula Sheik Adam & Co. for the supply of 5,000 cases of kerosine oil.

Resolved : " That, as applied for by the Commissioner in his memoranda Nos. 23648 and 23650 of 3rd instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

No. 11941.

Names of Owners.	Where.
Mr. Govindji Thakersi Mulji, Executor of Mr. Vishram Mowji... ...	Building at Warden Road.
„ Khimji Motichand, Manager of the Temple	„ at No. 23-33, Parel Road, Bhendi Bazaar."

It was agreed that, as applied for by the Commissioner in his memorandum No. 23952, dated this day, the question of the issue of notice for the demolition of unauthorised structure erected by Mr. Eduljee Nusserwanjee at No. 13, Chandanwadi, be deferred.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 23943, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 11943.

Considered again letter No. 22779, dated 25th ultimo, from the Commissioner, reporting the purchase of articles for the Homeless Leper Asylum.

Read letter No. 23852, dated 6th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to Standing Committee's Resolution No. 11478 of 31st ultimo, I have the honor to state that it is partly, I think, a Municipal institution, being built on Municipal ground and supported partly by Municipal funds. At all events, it is so far a Municipal institution, that all the accounts pass through my office and that of the Chief Accountant; and I prefer to report contracts in the usual way.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by K. M. Shroff, Esq.—

"That the following papers be *recorded* on the clear understanding that the Leper Home is not a Municipal institution :—

No. 11944.

Letters Nos. 22779 and 23852, dated 25th ultimo and 6th instant, from the Commissioner, reporting, under section 69 (*d*) of the Municipal Act, that he has sanctioned the purchase, from Mr. Dossabhai Framjee Cowasjee Dubash, Contractor for the Homeless Leper Asylum, of articles for the use of the Asylum, as per list submitted, amounting to Rs. 3,000."

Amendment, proposed by E. B. Carroll, Esq., seconded by Grattan Geary, Esq.—

"That letters from the Commissioner, Nos. 22779 and 23852, dated 25th ultimo and 6th instant, be *recorded*."

On a division, the amendment was *lost*, the votes being 4 *for* and 6 *against*.

The original motion was *carried* by 6 votes (*against* none).

Resolved : "That, as applied for by the Commissioner in his letter No. 23114, dated 29th ultimo, sanction be given to the filing of a suit against Mr. Bapuji Jamsetji Nazir, for the purpose of requiring him to remove the encroachment made by him on Municipal land adjoining the Tansa pipe line at Kapurbavri, Thana."

No. 11945.

Considered the following :—

No. 31966 of 1893-94.

Bombay, 30*th January* 1894.

To the MUNICIPAL COMMISSIONER.

Sir,—In reference to your No. 22988, dated the 27th instant, I have the honor to offer the following comments:—In reporting the occurrence of an Epidemic of Foot and Mouth Disease, I merely intended to report a fact and the import of that fact in my opinion to this City. Were I to discuss the relations between the occurrence of Zymotic Diseases amongst human beings and animals, I should have to repeat much that I have written since 1874, when I discovered Rinderpest to have occurred in Bombay. Rinderpest had not up to that time been identified in Bombay, and the first Commission of Veterinary Officers disagreed with the opinion I had come to, but a subsequent Commission agreed with and confirmed the opinion I had given ; and in consequence special powers were given to the Health Department to seize all animals suffering from Rinderpest and remove all of them to the special hospital I had opened on the Flats. These powers have been given to me from time to time to deal with infectious diseases amongst cattle. The special measures adopted by me in 1874 are referred to in the reports of that year on the health of the City. I do not think these special measures are necessary at this time. There have been, since my former report of the 17th instant, a number of cases of Rinderpest, and the disease is under observation. Should it increase to Epidemic proportions—not probable considering the period of the year—I would recommend that Government be asked to sanction the special measures of former years which have been adopted before, and I should be prepared to open a special Hospital as it has been done before. The removal of cattle from the charge of the people who own them is a measure which requires great care and prudence, and the people themselves must be satisfied of the necessity of so special a measure. There is one condition that has developed since the licensing of bullock stables has been transferred from the Health Department. It is this : stables being licensed have to be constructed in accordance with a series of excellent bye-laws, the consideration of which has been lately under a Committee of the Corporation. The effect of having bye-laws and of licensing stables for bullocks is to cause a concentration of animals in a few stables and all the effects of concentration. I am almost becoming to think that our well-meant efforts instead of doing good may do more harm than good ; in other words, the benefits from our bye-laws in one direction are not equal to the dangers caused by concentration. The great importance to the City of the occurrence and prevalence of cases of epidemic disease amongst animals is, as I have ventured to predict in my former letter, that it indicates conditions which, in my experience, have generally been followed by great sickness amongst human beings ; this is

the chief importance of the occurrence of an epidemic amongst cattle in the City; for the mortality amongst cattle in this City from foot and mouth disease is not more than one per cent., and further nearly all the population only use milk after it has been boiled. Epidemics of foot and mouth disease and rinderpest in this City follow the periodicity of Small-pox. I have in former reports again and again demonstrated that epidemic states amongst animals or human beings have always been synchronous with epidemic conditions and influences in the country around. The experience of this year is a further confirmation of this opinion. When I went to Poona in December 1893 to select bullocks, I saw animals brought into Poona suffering from foot and mouth disease. Of the forty-two bullocks I purchased in December 1893, three were attacked with foot and mouth disease before arriving in Bombay. They all recovered. I have stated in my former report "that there are grounds for apprehending that "the epidemic may be followed, as it has been followed before, "by much sickness towards the end of the year amongst human "beings." Such is the forecast I have ventured. I am asked to report for the Committee's next meeting "(1) the nature of the "sickness among human beings which is to be apprehended from "the epidemic of foot and mouth disease among cattle, and (2) as "to the means which should be adopted for the prevention of "the said sickness." The diseases from which I anticipate a high mortality are cholera, diseases of the digestive system and febrile types. I have never known an epidemic in which the increase of mortality was confined to one cause. We know that the effects of abnormal seasons on the public health of the population will be indicated by a high mortality from many disease causes. Since I wrote my warning of the 17th instant, cases of Small-pox have become prevalent; in one building in Parel as many as 10 cases have been found. The practical question arises in regard to the measures to be adopted. These measures are general sanitation such as is now enforced, and to forward these measures I do not think an additional establishment or expenditure, except for one purpose, is at present necessary. Under my letter No. 26514 of the 7th December 1893 I asked for an establishment to work the hand-engine used for flushing gullies and the sides of buildings; this establishment ought to be employed at once. But beyond the measures of house and street sanitation, there is a measure of supreme importance which should be considered, and that measure is the adjustment of the water-supply to the state of the drainage. There is the startling fact, which I discussed in the last Annual Report, that the quantity of sewage pumped out of the Island is about twenty-one million gallons, while the water delivered in the City is about 29 million gallons or more daily. I must refer to the last Annual Report, page 382. I write as follows on this important question:—

"There has been an enormous increase of the water-supply since "1892, from some 16½ million gallons to about 29 million gallons

"or more daily, and very little increase in the number of drains. "The Island is flooded and irrigated with water, and unless drains "are constructed to take away the water that comes into the City, "the life of a healthy population will not be possible; what has "been seen in countries of marsh and wet—poisoning of life from "malarial fevers—will be seen here. It is not possible to look to "the future except with anxiety. There has been, with incomplete "drainage, an enormous quantity of water—some five or more "million gallons of water daily—which the pumping power has "been unable to remove, a floating balance indicating danger; "and there must be still, even with perfect pumping power, an "enormous quantity of water which will not flow away and will not "be carried to the drains, because in more than half the Island "there are not drains. I hope much in the future from the new "and powerful pumps and the increased pumping power which, "it is believed, they will give, but drains must be constructed to "carry the water to the tributaries of the pumps. However "powerful the pumps may be, there must be drains in the districts "which have no drains if the pumps are to remove the water and "the drainage from the districts. The first principle of the pre- "servation of public health is, that the water coming into the City "should be taken away and not left in the soil, and this first "principle has been neglected in Bombay. Even the water "currents round the Island have been obstructed by the causeways "and embankments at Bandora and Coorla."

In conclusion, I can only say this important question of the difference between the water coming in and going out of the City is the most important of all the questions now affecting the public health, and it should be seriously considered at once.—I have, &c.,

T. S. WEIR, Health Officer.

No. 23580 OF 2nd February 1894.

Forwarded to the Municipal Secretary in reference to the Standing Committee's Resolution No. 11013 of the 24th ultimo.

H. A. ACWORTH, Commissioner.

No. 11946. *Resolved*: "That memorandum No. 23580, dated 2nd instant, from the Commissioner, forwarding report of the Health Officer, be *recorded*."

No. 11947. *Resolved* (with two dissentients): "That, as applied for by the Commissioner in his letter No. 23575, dated 2nd instant, the Corporation be recommended to sanction the employment, from 1st March next, of two Police Ramosis, on a salary of Rs. 11 each per month, one for day duty and one for night duty, at the Bullock Hospital, Sankli Street. The amount to be met from savings to be hereafter reported."

No. 11948. *Resolved*: "That, with reference to petition from Mr. Dosa Jiwan, complaining that he is not allowed to project a gallery from his building in Lohar Chawl Street, the Commissioner's memorandum No. 17338, dated 23rd November 1893, and accompaniments thereto, be forwarded to the Corporation, together with the expression of the Committee's concurrence with the views of the Commissioner and the Executive Engineer, namely, that no new projections should be allowed in streets and lanes of less than 40ft."

No. 11949. *Resolved*: "That a Sub-Committee, consisting of Mr. G. W. Roughton, the Hon'ble Mr. Javerilal U. Yajnik, the Hon'ble Mr. R. G. Oxenham, and Mr. K. M. Shroff, be appointed to consider and report on the question of the filing of the suit referred to in the Commissioner's letter to the Secretary, No. 23570, dated 2nd instant."

No. 11950. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 23749, dated 5th instant, sanction be given to the transfer of Rs. 325, from savings in the grant for cemeteries, V, stores, firewood, to General Office Establishment, II, printing Voters' List, to meet excess on the latter head due to insufficient budget provision."

Considered letter No. 23189, dated 30th ultimo, from the Commissioner to the Secretary, as under :—

SIR,—Referring to Corporation Resolution No. 3722 of 9th July 1891, I have the honor to say that a house on the line of road through Cavel then sanctioned, and which is shown in yellow on the accompanying plan, is in a dilapidated state, and the owner has applied for permission to rebuild it. The opportunity of opening so much of the road should not be lost, and I have the honor to request sanction to the acquisition of the property out of the 15 Lakhs Loan. The Executive Engineer estimates that it will cost not more than Rs. 4,200.—I have, &c., H. A. ACWORTH, Commissioner.

No. 11951. *Resolved*: "That letter No. 23189, dated 30th ultimo, from the Commissioner to the Secretary, be forwarded to the Corporation, with a recommendation that sanction be given to the acquisition for the future opening up and improvement of Cavel Wadi, of 65·33 square yards, or thereabout, of land as shown in the yellow colour on the plan marked 'A' dated this day, and filed in supple-

ment to Minute Books. The cost Rs. 4,200 to be debited to the 15 Lakhs Loan for roads in Agripada and elsewhere."

The consideration of letter No. 23378, dated 31st ultimo, from the Commissioner to the Secretary, on the subject of a suit being filed in the High Court to secure the necessary order enabling the Corporation to sell Government Paper for Rs. 5,000, deposited by Major Strutt, Managing Director of the late Electric Light and Power Company, was deferred, pending further enquiry in the matter by the Commissioner.

Considered letter No. 23203, dated 30th ultimo, from the Commissioner to the Secretary, as under :—

SIR,—In answer to Corporation Resolution No. 2408 of 12th June 1893, I have the honor to say that the Health Officer reports that the water of the Mustan Tank is "very foul," and the Executive Engineer forwarded, on 17th October, specimens of the water and mud from the tank, which he said were sufficient "to convince the most sceptic that the tank in its present condition is a source of nuisance." The cost of filling in the tank with murum would be Rs. 32,928, but if filled with alternate layers of road scraping 3ft. thick and murum 6 in. thick, it would only be Rs. 4,704; and this expedient, the Health Officer thinks, might be tried. I would suggest that the Standing Committee recommend the Corporation to sanction this small sum, to be paid as an advance to be met from savings to be reported hereafter, to put an end to an abominable nuisance. It is, of course, within the limits of possibility that we may ultimately have to resort to murum alone, but I think this very unlikely.—I have, &c., H. A. ACWORTH, Commissioner.

No. 11953. *Resolved* : "That letter No. 23203, dated 30th ultimo, from the Commissioner to the Secretary, be forwarded to the Corporation, with a recommendation that sanction be given to the expenditure of Rs. 4,704 for filling in the Mustan Tank, as the water thereof is very foul. The cost to be paid as an advance from available funds to be adjusted out of savings on new works to be reported hereafter."

No. 11954. *Resolved*: "That, as applied for by the Commissioner in his letter No. 23202, dated 30th ultimo, the Corporation be recommended to sanction the grant of Rs. 2,935-5-0 from savings in the grant for water-supply fittings, Municipal Office, to meet the cost of alterations and additions to the electric light fittings of the Office."

No. 11955. *Resolved* : "That, with reference to the Corporation's resolution No. 11650, dated 1st instant, as per margin, the Standing Committee recommend that the grant for the cost of establishment for working Garlick's incinerator be sanctioned at Rs. 700 per mensem, as follows :—

"That the Commissioner's report, No. 19866, dated 27th December 1893, on the subject of Messrs. Garlick's Incinerator be recorded.

"That the Commissioner's proposals therein made be approved, the incinerator taken over by the Municipality, and the sum of Rs. 7,500, being the second moiety of the value of the incinerator, be paid to Messrs. Garlick.

"That the Corporation will be prepared, on the recommendation of the Standing Committee, to sanction the establishment stated by the Commissioner to be required for working the incinerator."

27 Coolies	... Rs.	10	each...	Rs. 270	a month.
3 Muccadams	... „	15	„ ...	„ 45	„
3 Third Class Engineers	... „	40	„ ...	„ 120	„
12 Tons of coal	... „	18	per ton	„ 216	„
Oil, Waste, &c.	... ...		...	„ 25	
Repairs, &c.	... ...		...	„ 24	
			Total Rs.	700	

The charge for the current year to be met, from savings in the Health Department Budget, II, labour, scavengering, feed of bullocks."

No. 11956. *Resolved*: "That the following extract from the Corporation's Resolution No. 11645, dated 1st instant, be forwarded to the Commissioner for report as to the actual amount payable in the matter.

'That, on the recommendation of the Standing Committee, the Corporation will be prepared to sanction the expenditure of a sum not exceeding, in the aggregate, one month's pay to each of the following officers and servants of the Health Department :—

'*Inspectors*—Glover, Hallams, Desmier, Powell, Ringrow, Dawes, and DeSouza. *Sub-Inspectors*—Webb, Harris, Mowforth, and Kanoba Bahiroba. *Stable Mukadums*—Tukaram Zilloo and Raghoo Babaji. *Ward Mukadum*—Shaik Alli Ismail. *Cemetery Clerk*—Bane Khan Manwar Khan. * * * * * "

No. 11957. *Resolved* : "That, with reference to petition from Messrs. Krishnaji Narhar, Kesheo Govind Kanitkar and others, dated 19th December last, the Committee beg to report that the Commissioner states that the dyers inhabiting house No. 83, Phanaswadi, will not be granted a license for 1894-95.

"That, meantime, the removal of rubbish from the premises occupied by the applicants must be done by themselves, as required by section 368 of the Municipal Act.

"That the dyers have been called upon by the Health Officer to limewash their premises."

No. 11958. *Resolved* : "That, as applied for by the Commissioner in his letter No. 23783, dated 5th instant, sanction be given to the acceptance by him of the tender of Messrs. R. Ramchander & Co. for the supply of disinfectants during 1894-95 at the following rates :—Carbolic acid powder, containing 15 per cent. of carbolic acid, at Rs. 17 per cask of 200 lbs. net weight of powder ; Sanitas powder, casks containing 200 lbs. net weight of powder, at Rs. 17-6-0 per cask ; carbolic acid, at Rs. 2-14-0 per imperial gallon including drums ; cresole, Rs. 2-8-0 per imperial gallon including drums ; phenyle, Rs. 3-12-0 per imperial gallon including drums."

No. 11959. *Resolved* : "That the progress report of new works up to the end of December 1893 be laid on the table and brought on for consideration next week."

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 4th February 1894.

No. 11960. *Resolved* : "That the following be *recorded* :—Letter No. 23940, dated this day, from the Commissioner, reporting, with reference to the resolution of the Corporation, No. 8969, dated 7th December last, that he has accepted the tender of Messrs. John Fleming & Co., the second lowest tender received, for the supply of one thousand solid steel pickaxes, of the value of Rs. 1,666-10-8, against the grant of Rs. 2,000 sanctioned by the Corporation."

BOMBAY, 14*th February* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, ESQ., C.I.E., M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M. ; E. B. CARROLL, Esq., M.I.C.E. ; GRATTAN GEARY, Esq. ; HURKISONDAS NURROTUMDAS, Esq. ; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A. ; G. W. ROUGHTON, Esq. ; ACCACIO G. VIEGAS, Esq., L. M. & S.
H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 7th instant, were signed.

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* *See* Appendix B.

The seal of the Corporation was affixed (1) to deed of contract with Messrs. Framji Sorabji & Co. for the construction of strainers at Ghatkopar siphon head ; and (2) to ditto (in duplicate) with Messrs. Bulkley & Co. for the construction of sewerage in the Umarkhari District.

The seal was also affixed to the following :—5 attested duplicate debentures of Tansa Water Works Loan, Nos. 863/64, 871/72, 873/74, 875/76 and 879/80, for Rs. 1,000 each ; 1 attested duplicate debenture of the Bombay Municipal Sanitary Works Loan of 1885, Nos. 2000 N. N., for Rs. 500 ; 2 sub-divided debentures of the Municipal Building Loan, Nos. 1389 and 1390, of Rs. 500 each.

No. 12206. *Resolved* : " That, as applied for by the Commissioner, in his memoranda Nos. 24128, 24129, 24130, and 24131, dated 9th instant, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission :—

Names of Owners.			Where.
Hadji Allarakhai Hadji Hasan	...	Building	at No. 25, Parel Tank Road.
Mr. Arjoon Dhondoo	...	... „	at Wari Bunder.
„ Rastamji Jamsetji Maistry	...	„	at Zaoba's Oart.
„ Hansraj Karimji	...	... „	at Janjirkar Street."

No. 12207. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 24489, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 12208. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 24201, dated 9th instant, the Standing Committee approve, under section 169 of the Municipal Act, of a compounded sum of Rs. 5 being charged for water supplied to the Fancy Fair held last week on the Oval."

No. 12209. *Resolved* : " That the following be *recorded*:—Letter No. 24122, dated 9th instant, from the Commissioner, reporting that he has accepted the tender of Mr. Laksman Balkrishna, the lowest of eight tenders received, for the work of fencing a portion of the ground round the Foras Road Market at a cost of Rs. 649-9-8 against the estimate of the work, *viz.*, Rs. 942·99, exclusive of 10 per cent. contingencies."

Resolved: "That the following be *recorded* :—Letter
No. 12210. No. 24287, dated 12th instant, from the Commissioner, reporting that he has accepted the tender of Mr. Rahim Ibrahim Jamalani, for the supply of wood for cremation purposes at the Haines Road burial and burning ground at Rs. 5 per khandy of 28 maunds."

Resolved : "That the following be *recorded* :—Letter
No. 12211. No. 24290, dated 12th instant, from the Commissioner, reporting that he has accepted the tender of Messrs. Richardson and Cruddas, the lowest of the three tenders, for the supply of 11 hand-rollers, at a cost of Rs. 748 against Rs. 825 sanctioned by the Corporation."

Resolved : "That the following be *recorded* :—Letter
No. 12212. No. 24293, dated 12th instant, from the Commissioner, reporting that he has accepted the tender of Messrs. Walsh, Lovett & Co., the lowest of the 5 tenders received, for the supply of 5 sweeping and 2 scraping machines, at a cost of Rs. 4,595 against Rs. 6,050 sanctioned by the Corporation."

Resolved : "That, as applied for by the Commissioner,
No. 12213. in his letter No. 24296, dated 12th instant, sanction be given to the acceptance by him of the tender of Messrs. John Fleming & Co., for the supply of 1 six-ton steam road-roller, at a cost of Rs. 6,000, the amount sanctioned by the Corporation, the Municipality undertaking to fit the roller together in the workshops."

Resolved: "That, as applied for by the Commissioner, in
No. 12214. his letter No. 24295, dated 12th instant, sanction be given to the acceptance by him of the tender of Mr. Hussanali Abdulali for the supply of stationery and drawing materials during 1894-95 at schedule rates."

Read letter No. 23939, dated 7th instant, from the Commissioner to the Secretary, as under :—

SIR,—As a further supply of cement will shortly be required for the Umarkhari drainage and other drainage works, the former of which are about to commence, I have the honor to request the sanction of the Standing Committee to my ordering a supply of 1,500 casks from Messrs. John Fleming & Co., who have, under a contract lately entered into with them, supplied us with 1,500 casks of cement. The Drainage Engineer reports that the Johnstone's Elephant Brand cement, as now supplied by the abovenamed firm, is the best for the price (Rs. 7-4-0 per cask) of the many he has

tested, the last 12 briquettes averaging a strain of lbs. 438 per square inch after 7 days' immersion in water as against 350 lbs. demanded under their contract. The rate under the last contract was Rs. 7-4-0 per cask at the then exchange of 1*s.* $3\frac{3}{16}$*d.* Messrs. John Fleming & Co. now offer to supply the cement at Rs. 7-10-0 per cask, the advance in their price being due to the fall in exchange.

The cost of 1,000 casks will be met from the grant for Umarkhari drainage works, and of the 500 from the grants for the works for which the cement may be used.

I have also to request the sanction of the Standing Committee under section 72 (3) of the Act to dispense with the invitation of tenders.—I have, &c., H. A. ACWORTH, Commissioner.

No. 12215. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 23939, dated 7th instant, sanction be given to the purchase of 1,500 casks of Johnstone's Elephant brand cement from Messrs. John Fleming and Co. at Rs. 7-10-0 per cask. The cost of 1,000 casks to be met from the grant for Umarkhari drainage work, and of 500 casks, from the grants for the other works on which the cement may be used.

" That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as there is no likelihood of a better quality of cement being obtained at such reasonable rates and as the last 12 briquettes supplied by Messrs. Fleming averaged a strain of 436 lbs. per square inch as against the 350 lbs. demanded by their contract."

No. 12216. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 23853, dated 6th instant, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,154-13-7, from savings in the grant for cemeteries, V, stores, firewood, to accounts and expenditure, audit establishment, section 1, office establishment, superior staff, to meet acting allowance payable to officers appointed to act during the absence of the Chief Accountant on privilege leave from 22nd January to 19th March 1894."

No. 12217. It was agreed that the consideration of memorandum No. 23930, dated 7th instant, from the Commissioner to the Secretary, requesting sanction to the transfer of Rs. 5,700 to meet excess on the grant for

pensions, gratuities, &c., be postponed till next week, and that in the meantime the Commissioner be requested to submit the details of the charge in question.

No. 12218. The consideration of memorandum No. 24271, dated 12th instant, from the Commissioner to the Secretary, asking for a transfer of Rs. 2,000, to meet excess on the grant of repairs to meat-vans was postponed till next week, pending further inquiry in the matter by the Commissioner.

No. 12219. *Resolved*: "That, with reference to the Corporation's Resolution No. 11911, dated 5th instant, as per margin, the Corporation be recommended to sanction the outlay of Rs. 2,500 for the moiety of Mr. Stevens' fees, *plus* half the cost of printing his award, to the debit of unappropriated cash balance."

"That the President be requested to inform Government, in reply to letter No. 257, General Department, dated 23rd January 1894, from Mr. Acting Chief Secretary Vidal, that the Corporation concur in the appointment of Mr. F. W Stevens, F.R.I.B.A., A.M. I.C.E., M.S.A., C.I.E. as the person appointed to fix the rateable value of the buildings and lands in the City of Bombay vesting in Her Majesty, and consent to pay (1) a moiety of the cost of remuneration to be paid to Mr. Stevens, such moiety not to exceed in any case Rs. 2,500, and (2) half the charges for printing the award. That the Corporation will be prepared to sanction the necessary outlay on the recommendation of the Standing Committee."

Considered letter No. 24298, dated 12th instant, from the Commissioner to the Secretary as under :—

SIR,—I have the honour to request the sanction of the Standing Committee, under sections 169 and 170 of the Municipal Act, to the present arrangements for the supply of water by meter and for meter hire being continued during the year 1894-95 except in the following case :—Water supplied to Municipal gardens, which at present is charged at the rate of annas 10 per 1,000 gallons, the rate applied to all Municipal supplies, be charged at annas 4 per 1,000 gallons just as in the case of Government gardens, for which the Standing Committee have, by their resolution No. 6317 of 4th October 1893, sanctioned that rate. I also attach for the approval of the Standing Committee a list of the classes of the premises, the supplies to which have hitherto been charged at the trade rate of annas 12 per 1,000 gallons. I have also to request the approval of the Standing Committee to the Carnac Bunder night-soil depôt being supplied with water free of charge.—I have, &c., H. A. ACWORTH, Commissioner.

Proposed by the Hon'ble Mr. R. G. Oxenham, seconded by A. G. Viegas, Esq.—

No. 12220. "That, with reference to letter No. 24298, dated 12th instant, from the Commissioner to the Secretary, the existing rates for the supply of water by meter and for meter-hire, under sections 169, 170 and

276 of the Municipal Act, be continued during the year 1894-95, provided that, in the case of water supplied to Municipal gardens, a compounded sum be charged, calculated at 4 annas per 1,000 gallons.

"(2) That the Committee approve of the charging of 12 annas per 1,000 gallons as hitherto to the following classes of premises :—(1) Bathing places ; (2) Bone-crushing mills ; (3) Building in course of construction; (4) Cattle markets ; (5) Chunam kilns ; (6) Cloth markets; (7) Cotton and other presses ; (8) Dhobiwada ; (9) Docks; (10) Dockyards ; (11) Drinking fountains and troughs privately owned ; (12) Dye-works ; (13) Electric lighting stations ; (14) Fire mains ; (15) Flour mills ; (16) Gas works; (17) Hotels; (18) Ice factories ; (19) Iron foundries and workshops ; (20) Irrigation land ; (21) Printing presses ; (22) Private markets ; (23) Railways ; (24) Rope walks ; (25) Saw mills and timber yards ; (26) Shipping ; (27) Spinning and weaving mills of all kinds ; (28) Stables for horses or cattle other than milch cattle (except those attached to the residence of the occupier of the stable and only for his own animals) ; (29) Sweetmeat factories ; (30) Tanneries ; (31) Theatres ; (32) Thread factories ; (33) Tramways ; (34) Wool-cleaning factories.

"(3) That half the cost of the water supplied to the Carnac Depôt be debited to the Health Department and half to the Drainage Department."

Carried.

No. 12221. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 24297, dated 12th instant, sanction be given to the payment of Rs. 60, being conveyance allowance at Rs. 15 per mensem, from 1st November 1893 to 28th February 1894, to be paid to the second Sub-Inspector, Water Works. The amount to be met from savings in the grant for inspection, distribution and waste prevention, section I, establishment and labour, Water Works."

No. 12222. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 24115, dated 9th instant, the Corporation be recommended to sanction the continuance of the employment of two Maistries on Rs. 35 and Rs. 30 per month each for the Colaba Sewerage Works; and to the employment of two Maistries on Rs.35 and Rs.30

per month each for the Umarkhari Sewerage Works, the cost to be met from the grants for the respective works."

No. 12223. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 24294, dated 12th instant, the Corporation be recommended to sanction the expenditure of Rs. 250 for the purchase of coal and stores to work the hydraulic lift of the Municipal offices up to the end of the current financial year. The cost to be met from the saving in the grant for the lift and fire service establishment."

No. 12224. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 24269, dated 10th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Bulkley & Co., for the construction of Umarkhari sewerage in order to provide for the provision of two tidal flaps for the ovoid sewer and a catchpit for the collection of silt at the junction of the sewer with the main sewer at a cost of Rs. 3,507."

It was agreed that the following be circulated together with all papers on the subject and brought on for consideration at a future meeting :—Letter No. 24219, dated 10th instant, from the Commissioner, reporting the total charges imposed on the Corporation, owing to the new office not being completed within the contract time, &c."

No. 12226. *Resolved* : "That, as applied for by the Commissioner, in his letter No. 23782, dated 5th instant, the Committee approve, under section 381 of the Municipal Act, of a notice in writing being served upon Mr. Essa bin Khalifa, requiring him to fill up with good earth the whole of the rear compound of his Arab horse stable at Bellasis Junction Road."

Considered the following :—

THE NIGHT-SOIL DEPOT, KAMATHIPURA.

THE Sub-Committee appointed on the 22nd March last, as per margin, beg to report that the estimated cost of erecting a new depôt exclusive of the value of a site for the same, is only Rs. 16,538, but that the difficulties in the way of the shutting up of the existing depôt and opening another one in some other locality are so great as to render it undesirable that such an

"That a Sub-Committee, consisting of Mr. Bhalchandra Krishna, Mr. Geary, Mr. Viegas, and Mr. Javerilal Umiashankar Yajnik, be appointed to consider and report on letter No. 26476, dated 8th instant, from the Commissioner, on the subject of the complaint from Mr. Narsingrao Syboo and other inhabitants of Kamathipura."

alteration should be attempted. In carefully considering the whole question, the Sub-Committee asked the Health Officer to report whether he could select any isolated site on the Flats for a new depôt. He replies that no such site is to be found which would not be as great, if not a greater, nuisance than the one at Kamathipura, which is the least complained of of any in the city. Any attempt to open a new depôt would be resented by the inhabitants of the locality selected, and the result of the closing of the Kamathipura depôt might be that all the other similar depôts would have to be closed. That would greatly increase the difficulties in the way of collecting and disposing of the night-soil and enhance the objections to the existing mode of basket collection on account of the much longer distances that would have to be traversed by the carts and the halalkhors. As far as possible, the quantity of filth disposed of daily at the Kamathipura depôt has been reduced, as many as a dozen cart-loads collected in the northern parts of the Island being now emptied daily at the new depôt at Parbhadevi. Moreover, as soon as the sewerage of the Mazagon and Umarkhari districts is completed, it may be possible to establish collecting depôts there, and the quantity of night-soil conveyed to Kamathipura will be reduced to a minimum. With this end in view, it is advisable that in the meantime the authorities of the J. J. Hospital and the other hospitals adjoining should be addressed and asked to arrange for the construction of water-closets and the connection of them with the new sewers as soon as completed. Regarding the question of an alternative of the present system of privies in Kamathipura on a principle suitable to the requirements of the inhabitants, it appears to the Sub-Committee that the petitioners might be informed that the depôt can be closed if they convert their privies into water-closets and properly connect them with the sewers.

As to the other heads of complaint contained in the petition, it is not necessary for the Sub-Committee to inquire into or report on the subject of house connections generally, as the Special Committee appointed by the Corporation are still pursuing their investigations. The complaints about an "unused filthy tank" appear to be groundless, as the tank was some time since filled in with sweet earth.

The other causes of complaint as to the presence of scavengers' chawl, Municipal stables, loaded and unloaded refuse carts, sweepers' chawl, dharamsala, leper asylum, Chinese and Mahomedan burial-grounds, cholera and small-pox hospital, and Municipal milch-cattle stables are fully dealt with by the Commissioner's letter No. 26476 of the 8th March last and the Health Officer's letter No. 32181, dated 28th February 1893, which are circulated herewith, together with Dr. Weir's further report of 23rd instant.

GRATTAN GEARY.
BHALCHANDRA KRISHNA.
JAVERILAL U. YAJNIK.
ACCACIO G. VIEGAS.

BOMBAY, 29*th January* 1894.

MEMORANDUM No. 30981 OF 1893-94.

BOMBAY, *23rd January* 1894.

TO THE MUNICIPAL COMMISSIONER.

I am unable to recommend any other position on the Flats in which a depôt would not be as great, if not a greater, nuisance than the depôt in Kamathipura.

2. The inhabitants around other depôts would have to be consulted. The Kamathipura depôt is the depôt least complained of in the city, and, until the recent agitation, I never heard of any complaint against it. The Kamathipura depôt being in the centre of the lowest class in Bombay, is by far the least objectionable depôt in the city. I would remind the Commissioner of the opposition of Government to the Carnac Bridge night-soil depôt and that Government has only tolerated this depôt because the Municipality have protested that it was not practicable to close the depôt.

3. If the Kamathipura depôt is closed, then every other depôt in the city will have to be closed. It seems to me the seriousness of the matter has not been fully realized. The public living around other depôts will have to be considered, and the halalkhors too.

4. I believe the opposition to the Kamathipura depôt is more or less unreal. The people living immediately around the depôt have never until this petition made a complaint. As far as I can make out, the real opposition to the depôt is on account of a number of squatters who have sat down and formed a private market, against the public interest, opposite the nightsoil depôt.

T. S. WEIR, Health Officer.

No. 22672 of *24th January* 1894.

Forwarded to the Municipal Secretary. The Commissioner quite concurs with the Health Officer in thinking that the objections to the Kamathipura depôt have been much exaggerated.

H. A. ACWORTH, Commissioner.

No. 26476 OF 1892-93.

BOMBAY, *8th March* 1893.

FROM H. A. ACWORTH, Esq., C.S.,
Commissioner,

TO THE MUNICIPAL SECRETARY.

SIR,—With reference to Standing Committee's Resolution No. 11325 of 1st ultimo, I have the honor to forward a memorandum from the Health Officer on the petition addressed to the Corporation by residents of Kamathipura.

2. The Corporation will observe that the Health Officer dwells strongly on the factitious character of the complaints "everything for which the Municipality is responsible is bad and everything for which they or their friends are responsible is good." It is, I think, impossible for any one to peruse the petition without admitting

that there is much justice in this part of the Health Officer's criticism, and it is to be regretted that the very obvious bias which characterises the petition deprives it of nearly all the value which would attach to a genuine complaint. It commences by an invocation to the name of a member of the Corporation whose utterances on sanitary matters carry unusual weight on that body, and by this means, as well as by a vehement adoption of the views he is known to entertain, in opposition to those of Dr. Weir, on the subject of the material used to raise the level of Kamathipura, the petitioners no doubt trust that they will succeed in enlisting in support of their several allegations the powerful voice of Dr. Blaney. In this way and by joining in the hue and cry against house-connections, the petitioners probably suppose that they will also call to their aid such a torrent of acquiescent denunciation as will sweep away what appears to be their real grievance (if any is real, which certainly cannot be stated with any confidence), *viz.*, the night-soil depôt.

3. It is advisable, I think, that I should take the different allegations made in the petition *seriatim* and discuss them with as much, or nearly as much, detail as the Health Officer has done. The Corporation, no doubt, do me the justice to believe that I am able to recognize a grievance when I see one, and to deal with it in a perfectly impartial manner, even if it should be presented in company with a general indictment of a set of circumstances for which I am more or less responsible.

4. The heads of complaint may be thus summarized :—(1) The Night-soil Depôt ; (2) House-connections ; (3) "An unused filthy Tank" ; (4) Scavengers' Chawl ; (5) Municipal Stables with loaded and unloaded refuse carts ; (6) Sweepers' Chawls ; (7) Dharamsala Leper Asylum ; (8) Chinese and Mahomedan Burial Grounds ; (9) Cholera and Small-pox Hospital ; (10) Municipal Milch Cattle Sheds. I will take the house-connections and the night-soil depôt last of all, and refer, in conclusion, to the "filling" question. Complaint No. 3, "the unused filthy tank," would appear to have been drafted by some person whose acquaintance with the locality was small. There is no such tank, though there used to be one. Complaints 4 and 6 may be taken together. I am personally aware of no reason why either scavengers or sweepers, both of them persons who perform useful functions, should not be permitted to live ; and, if so, they must obviously live somewhere, and that somewhere must be within reasonable distance of their work. It follows that they must live in, or in the vicinity of, the populous areas, because it is the existence of population which renders their work necessary, and where the population is, there their work lies. But I will go further than this and say, following the Health Officer on this point, that the scavengers' chawl which is complained of is the best and cleanest chawl in Kamathipura, with the single exception of the sweepers' chawl which is not only the best building of this class but the best building of any class whatever in Kamathipura—the

most sanitary and the least offensive. When I reflect that the latter chawl is in Cursetjee Suklajee Street, and to what class most of the remaining inhabitants of this street belong, I cannot refrain from the remark that, though Bhungies will occasionally drink more than is good for them and make more noise than is good for their neighbours, yet to villify them as a standing nuisance, and say not a word about the other inhabitants of Cursetjee Suklajee Street, is to exhibit a startling failure to appreciate the moral topography of the district. I am sorry to be obliged here to take exception to a remark made by Dr. Weir in his report, *viz.*, that the drainage at the new sweepers' chawl has been carried out "on the system suggested by him before the Committee of the Corporation." If this means anything at all, it must mean that the system was one devised or invented by him, which is decidedly not the case, as I have pointed out to him officially on two previous occasions. As, in spite of my having done so, the assertion is repeated here, I take occasion to contradict it emphatically. The system carried out at the new chawls is not in fact the device of any one person. It is the result of much conflict and clashing of various views, to which Dr. Weir doubtless may have contributed his quota, but it is to be borne in mind that a casual reference, remark or recommendation interjected into a report, or into an answer to a question proposed in examination, does not entitle the person making it to appropriate to himself all the credit for the results of prolonged experiment, thought and toil by others. The device of intercepting catch-pits had been considered by Mr. Walton and myself long before Dr. Weir ever referred to it at all, the system of open drains was already under trial elsewhere, when he was examined before the Committee of the Corporation, and, as regards the increased size of the down-take pipes, certainly several members of the Corporation had recommended them before Dr. Weir, to use his word, "suggested" them. I should not make these remarks if I were not obliged to do so.

Turning now to the "Dharamsala Leper Asylum," I am sorry to have to acknowledge the fact that there are still lepers in it; but considering what has been done to relieve the city of this nuisance, and considering that the lepers in the Dharamsala are only a fraction of the number that used to be there, the petitioners might, I think, show a little more sensibility to the advantages they have gained in this respect during the past two years. I do not believe that there is any city or town in India which suffers so little from the leper nuisance as Bombay does since the Matunga Asylum was started, and it is hardly the time to begin a complaint against the Leper Dharamsala when its leper inhabitants have been diminished by 50 per cent. or more.

The complaint about the "Burial Grounds" is frivolous, and strongly indicative of the bias and prejudice under which the petition has been prepared. The Chinese Burial Ground is unused and perfectly innocuous. The Mahomedan Burial Ground is also no nuisance, and the Corporation are doing their best to prevent it from ever becoming

one by seeking to provide the Mahomedans who use it with an alternative place of burial elsewhere. Certainly, it is no fault of mine that that alternative burial ground has not been already provided; but unless the Corporation resolutely determine to place the solid interests of the community at large, before the sentimental prejudices of private individuals, no suitable alternative ever will be found. I agree with every word which the Health Officer says about the Infectious Diseases Hospital and the Municipal Milch Cattle Stables. Theoretically, and if I were building a city under conditions which did not admit of the limitations imposed by space, time and money, I would not place a hospital within an inhabited area at all ; but such conditions are not realisable outside of Utopia, and, practically speaking, I believe the position of the hospital is as good a one as can be found, while its sanitary arrangements are unexceptionable. The complaint against the "Milch Cattle Stables" is almost too absurd to be referred to. As the Health Officer rightly remarks, they are the best stables in the city, and to single them out for condemnation, and pass unregarded by all the private cattle stables, shows a degree of animus which cannot fail to discount every single statement made in the petition.

"The Municipal Stables with loaded and unloaded refuse carts" is a matter of complaint which requires but little more consideration. The stables themselves seem to me absolutely free from objection, and the refuse carts are decidedly less of a nuisance than when standing in the public streets. The immediate vicinity is comparatively open, and I doubt whether any inconvenience on this head is in reality felt. The empty night-soil and cesspool carts which stand near the stables are, it seems to me, more objectionable, though I think it is wonderful how little offensive they are and how clean they are kept, and I greatly doubt whether the neighbourhood is practically aware of them.

The night-soil depôt is undoubtedly the head and front of the offences which the petitioners dwell on. Two questions arise with regard to it—1*st*, whether it can be transferred ; and 2*nd*, if not, whether it can be improved so as to render it completely inoffensive. On the first point I must confess myself to be completely at a loss. If time and money were no consideration, it could, of course, be transferred to the Flats ; but it seems to me that the extra expense renders this course almost prohibitive. For almost the whole of the 70 night-soil carts and 800 night-soil baskets which are discharged at Kamathipura, it would be a very much longer journey to the Flats than to Kamathipura and indeed it may be taken as certain that it would not be feasible thus to transfer more than a small proportion of the whole, without a very heavy increase to our staff of carts, drivers, and bullocks, entailing not only a considerable initial expenditure, but a most serious addition to maintenance charges. Practically, I do not myself consider that the depôt is such a nuisance as to justify this measure. I am also of opinion that the true solution of the question lies in the general introduction of the water-closet

system which, I have no doubt, might be introduced without any great difficulty, and which, I consider, ought to be introduced, whether the difficulty be great or small. But I am aware that I shall not get many members of the Corporation to agree with me. The charms of a system which keeps the streets full every morning of carts of night-soil and of halalkhors perambulating with night-soil baskets and then sends into the sewers at half a dozen points, scores of tons at a time, what ought to reach them in ounces at tens of thousands of points, are not very distinct to me. But I am aware that to others it presents attractions superior to a cleanly water-closet system, and that it is useless to dwell on the question at the present time. Practically, therefore—and if it be taken for granted that the total abolition of the Kamathipura Depôt is impossible—it remains to be considered whether it can be rendered inoffensive by enclosing the whole space in a chamber or otherwise. It seems to me that it ought to be possible to do this, and if the Corporation think the nuisance one of sufficient magnitude to demand some such remedy, I will consult the Executive Engineer on the subject. As to this, I shall await an expression of their views.

I think that the Corporation will not expect from me any detailed reference to the house-connections in Kamathipura. Whatever their imperfections may be, they are a great deal better than none at all; and I, personally, could not recommend the Corporation to incur the expense of substituting for them any new model, seeing that they are perfectly efficient where they are used and not abused, or may, I think, be made so with trifling modifications. But I hesitate to say much on this subject in the way of criticism, while the whole of it, in all its branches, is under the separate consideration of a Committee.

It remains for me to refer to the vexed question of "filling in" of Kamathipura. The petitioners deny what Dr. Weir asserts, that garbage has been used for this purpose in this district to any material extent. The Corporation last October passed a resolution directing enquiries to be made on this subject, and a report would have been submitted some time ago on this part of the resolution, but it contained also other demands for report which are not ready. The Health Officer suggested that "As a first step, borings should be made in each street, or in a number of streets, say, to the levels at which sweepings were found underneath the halalkhor chawls and the milch cattle stables." We have no record as regards the milch cattle stables, but in the case of the halalkhor chawls, the "black filling or kuchra" was found at 78·00 T. H. D., the level of the ground being 86·53, *i.e.*, or 8½ feet below the surface. Pits were sunk by the Engineer's Department in 16 places in a number of streets taken at random. I append a tabular statement showing the details of the operations. In 13 cases the pits were 8½ feet deep or more, up to 10 feet. In three they were under 8½ feet. The cost was Rs. 300, and has been paid out of my Discretional Contingencies. Practically, the result does not sustain the Health Officer's

allegations. In one or two cases there were faint signs of vegetable matter, but always to a very limited extent. On the whole, all the pits showed pure earth. The Health Officer, however, was not satisfied with the result, and requested that the pits might be deepened to 25 feet and that seven additional pits might be sunk in places pointed out by him. This would have cost altogether over Rs. 6,000, and I did not feel justified in incurring the expenditure without further reference to the Corporation. The Health Officer then had 5 pits sunk to a depth of 6 feet in

(*a*) 10th Street,
(*b*) Stable Street,
(*c*) 15th Street,
(*d*) 7th Street,
(*e*) Bapty Road.

In each of these he reports that water was found about 2 feet under the surface, and "black earth" about 3 feet under the surface. All these holes are said to have been dug "in the line of houses and not in the streets." I presume the inference is, that the streets have been filled in with good earth, but not the residential area. At all events the Health Officer himself in the first instance suggested borings in the streets. The cost of sewers in Kamathipura is said to have been Rs. 1,91,047-8-10. I cannot say what the cost of the filling was. In the contract specification for the construction of them the material to be used in raising the road was limited to "the best of the surplus materials from the trenches to be selected by the Engineer," and, in case this was insufficient, earth was to be supplied. None of the sewers are laid deeper, the pipes than 4 feet 8 inches, the masonry sewers than 9 feet (and only one masonry sewer was as deep as that, the others were 6 feet and 7 feet 6 inches), so that nearly all the borings went much deeper. It is now for the Corporation to say whether they wish further borings to be taken, and, if so, where. One or two points in the district are known to have been filled in with kuchra, and it is useless investigating these. What is wanted to be known is the general condition of the district. As regards the streets, I doubt whether any further borings are required, but the Corporation may, perhaps, wish borings to be taken elsewhere even at a cost of Rs. 6,000 or more. On this point I await orders.—I have, &c.,

H. A. ACWORTH,
Commissioner.

No.	Locality.	Total depth of pit.	Nature of soil at bottom of pit.	Depth of filled in materials.	Nature of materials used for filling.	REMARKS.
1	Kharsetji Suklaji Street Junction with Bellasis Road..	10′	Clay.	2′-6″	Earth filling.	
2	Kamathipura 11th Street	10′	Do.	3′-6″	Do.	In which there is a black seam, 8″ thick.
3	Kharsetji Suklaji Street	8′	Clay lime stone nodules.	2′-6″	Do.	This hole has been filled in because the road was hollow round about it.
4	Kamathipura 5th Street	8′	Clay.	5′	Do.	
5	Kharsetji Suklaji Street near Bapty Road Corner ...	10′	Clay and moorum.	5′	Do.	In which there is a black seam, 4″ thick.
6	Do. do. opposite Bhangi Chawl ...	7′	Whitish clay.	3′	Do.	
7	Centre Road South end in Kamathipura 2nd Street ...	9′-6″	Do. and moorum.	.. ...	.....	This was filled in immediately after the inspection.
8	Kamathipura 5th Street between Centre Bazar Road...	8′-6″	Do.	.....	.....	Do. do.
9	Centre Road, 8th Street	9′	Clay and moorum.	3′	Earth filling.	Do. do.
10	Do. 12th Street	9′-6″	Do.	2′-6″	Do.	Do. do.
11	Centre Road, Foras Road Junction with Bellasis Road	9′-6″	Clay.	5′-9″	Do.	
12	Bazar Road Junction with Bellasis Road	8′-6″	Do.	4′-6″	Do.	
13	Do. 12th Street	9′	Clay and moorum.	2′-6″	Do.	
14	Do. opposite 8th Street	10′	Stiff clay.	2′-6″	Do.	
15	Do. do. 5th Street	9′-6″	Clay.	1′-6″	Do.	
16	Do. Junction of Bapty Road	10′	Do.	3′-6″	Do.	This was filled in after the inspection.

MEMORANDUM No. 32181, *dated 20th February* 1893.

TO THE COMMISSIONER.

Returned to the Commissioner.

I have the honor to make the following remarks on the petition from Mr. Narsingrao Sayboo and others not named, to the address of the Corporation, regarding the sanitary condition of Kamathipura.

This is a curious and instructive instance of how people see everything for which the Municipality is responsible to be bad, and everything for which they or their friends are responsible to be good. Kharsetji Suklaji Street, or other streets in Kamathipura which are filled with evilness, may be occupied by the foulest scum of the city of Bombay or of any city in the World. But poor halalkhors must not live in it even on the other side or at the far end, and the Municipality must not build dwellings for them. I should like to know the names of all the petitioners, who signed the petition, to know if they have houses in Kharsetji Suklaji Street or in any of the other localities or avenues of Kamathipura ; 19·55 per cent. of the population are low-caste.

Their ways are excellent in the eyes of the petitioners, but no place must be found for the low-caste who are in Municipal employment. From nearly every house in Kamathipura water and refuse is thrown on to the public ways and yet the people who complain would rather see filth in front of their buildings from their own dwellings than collected in carts on the road to removal. They draw a comparison between the state of the roads and ways in Kamathipura and in the Fort, Colaba and Malabar Hill. They might as well draw a comparison between the dwellings and the population of Kamathipura and the dwellings and the population of the Fort, Colaba and Malabar Hill.

I will now reply to the petition in detail. There has been a night-soil depôt in Kamathipura for over 25 years, and although, no doubt, the quantity of night-soil brought to the depôt is now more, it must not be overlooked that the system of disposal has been very much improved and is now excellent. The night-soil is discharged through receiving hoppers into a central trough and *immediately* flushed by water into a sewer. The depôt is worked with the least possible nuisance, and beyond a certain amount of annoyance which the passage of the carts through the narrow streets, no doubt, causes to the inhabitants of the district, the depôt and its working cannot be said to create any nuisance. But still I must submit that the nuisance from the night-soil carts is less than the other nuisances which disturb the night in Kamathipura. The work of the depôt is under very careful supervision, and every endeavour is exercised to prevent nuisance or offence. The surroundings of the depôt have been the same for many years, that is to say, as the centre of Kamathipura is known to be. I do not contend that the situation of the depôt in Kamathipura is the best that could have been obtained, but it was, no doubt, the best at the time; in the opinion of those

who selected it, it is the best site now available. The depôt, as all depôts could, no doubt, be removed if there was no question of economy, but the petitioners seem to forget the very great extra cost such a procedure would entail. To remove the depôt to some other locality would mean a similar "nuisance" to some other people and an interruption to the whole halalkhor service system of the district, and a much larger staff of halalkhors would obviously be necessary in order to perform the service. Night-soil depôts, no doubt, are unpleasant places, but there can be no question as to their necessity. If only the question of nuisance and not the question of economy is considered, then the Municipality ought to purchase a large open space around the night-soil depôt in Kamathipura and around the night-soil depôts in other parts of the city.

The petitioners allege that their surroundings are dangerous on sanitary grounds. I will shortly notice what they refer to—"*The unused filthy tank.*" I presume they refer to the tank which was in Stable Street. This tank has now been filled in.

I do not know why the Municipal bigaries' chawl should be particularly singled out. There are many other chawls in Kamathipura occupied by exactly the same class of people, but not as the Municipal chawls are, well ventilated and clean; as I have before stated 19·55 per cent. of the population are of the same race as the Municipal scavengers, why have they not referred to them as well?

"*The Municipal Stable*" is E Ward Stable—a stable which has been in existence for many years. I am not aware in what particulars it could be called insanitary. There are many other stables in the district, both bullock and buffalo, which are certainly much more objectionable and which I have strongly objected to, and some of which are on the sides of the public streets. It is true there are a number of loaded carts kept for a certain time at this stable, but if they were not placed there they would be standing in the public streets. I do not know what objection the petitioners have to the new Halalkhor Barracks. They are in my opinion one of the finest blocks of buildings for residential purposes which can be found in the City, and the drainage has been carried out on the system I suggested before the Committee of the Corporation. "*The Chinese Burial Ground*" has not been used for burial purposes for many years; it is simply an open space. "*The Leper Dharamsala*" has now only a few inmates. "*The Cholera and Small-pox Hospital.*"—The buildings at Grant Road used for Hospital purposes have not been occupied since 26th July 1892. I fail to see what sanitary objection can be taken to them. They are, I have no doubt, in a very much better sanitary condition than the dwellings of many of the petitioners. "*The Municipal Milch Cattle Stables*" supply a very great public convenience. They are the best and cleanest of any such stables in the City. "*The Mahomedan Burial Ground*" is objected to as all else, for which the petitioners are not concerned. The difficulties of dealing with burial grounds are so obvious that I did not refer to them.

The boundaries of the Kamathipura Section are as follows :—

North	...	...	Bellasis Road.
West	...	...	Kharsetji Suklaji Street.
South	...	...	Grant Road.
East	...	...	Duncan Road.

The population of Kamathipura in 1881 was 28,455, and in 1891, 29,203. These figures show only a little increase in the population for the last decade, while there has been also little or no increase in the actual number of buildings. Kamathipura is the sixth most densely crowded locality in the city.

From the statement in para. 3, the petitioners wish that it might be concluded that "the whole of the inhabitants of Kamathipura suffered from the working of the depôt. I use the word working, with a definite purpose, for it cannot be contended that the depôt is at any other time a nuisance. At any other time than when being used, it is an open space, clean, cleaner than the inside of many dwellings in Kamathipura. It is true that night-soil from other districts of the city is brought to the Kamathipura Depôt and must be so brought until all depôts, such as Khara Talao, Bhungy Mohlla and others, are constructed, so as to permit of the excreta of the districts they serve being treated in the same way as in the Kamathipura, Girgaum and Carnac Road Depôts, that is, until they are connected to the sewerage system of the city. With the very plentiful water supply we now have, and new sewers which were constructed for this purpose, I see no reason why these depôts should not be constructed on the new system ; by so altering them, the nuisance and annoyance caused to the public by the passage of night-soil carts through the streets would be prevented.

I have no reason to withdraw from the assertion in my last annual report which the petitioners quote in para. No. 4 of their petition. "The petitioners emphatically deny the correctness of this "statement. We assert from our personal knowledge, as the "oldest inhabitants of Kamathipura, that it has been filled in with "garbage."

The petition sent to me is signed by Mr. Narsingrao Sayboo Wadnalla and others, about two thousand ; who these two thousands may be I do not know. I place no value whatever upon the mere signing by a number of people of a petition, the purport of which, I have not the slightest doubt, the bulk of the signatories know nothing of. There is not the slightest doubt that the hollows and low-lying ground in and about the district of Kamathipura have been filled in and raised with garbage. I have had trial-pits dug in several places in the district, and even at a depth of a few feet below the existing levels, ample evidence is found that refuse has been deposited. It must not be forgotten that the present levels of Kamathipura are not what they were, or that the district has been raised. I would ask what was done with the refuse of the city 40 or 50 years ago. The refuse had to be removed and disposed of as

circumstances permitted and in the cheapest manner, and that simply was reclamation of the nearest low ground. The site occupied by the new Halalkhor Barracks in Kharsetji Suklaji Street was reclaimed with cuchra in or about the time, I believe, of Mr. Forjett. The Corporation was in consequence called on to pay a larger sum for deeper foundations. The ground occupied by the Municipal Milch Cattle Stables in Kamathipura was also filled in with refuse. I remember, when the foundations for the Municipal Milch Cattle Stables were dug, seeing the foul ooze that came forth.

I quote the following from the report of Dr. A. H. Leith of 1864, pages 16 and 17, paras. 34 and 35 :—

"The making or metalling of roads has not kept pace with the "increase of the town as was seen in Kamathipura, much of which "had only muddy lanes, and therefore had not even the open side-"gutter which usually accompanies a metalled road. In part "of Kamathipura the drainage consisted of open ditches and side-"gutters cut in the earth without any masonry, and these were "more or less full of fetid mud. It was seen that the necessary of "a populous tenement emptied itself by a surreptitiously-made "drain into one of these gutters at the side of Dhunji Sooklaji "Street."

"The way in which the night-soil and the street sweepings have "been disposed of has, for many years, been the occasion of com-"plaint. The want of a proper system of drainage rendered it "necessary to exclude so far as possible the former from the drains, "and for a short time it was put into pits in the Flats ; afterwards "for some years it was deposited on the western or wind-"ward shore, where the nuisance caused by it was very great; "now it is delivered into the tidal current of the harbour at "Chinch Bunder by a conduit that discharges below low water "mark. At that bunder there are tanks for the reception of "what is brought by the sweepers in their baskets, and what "is collected at Sonapur, Kamathipura, Khara Talao and Parel "in the carts which are stationed at these places for its "reception. There are for the whole Island but forty-one of "those carts, and some of them are leaky. The street sweepings "have been used in filling up hollows, in preparing ground for "building and other purposes. A great part of the reclamation "beside the Cooperage and between that place and the Apollo Pier "was thus effected and other land on the harbour side of Colaba has "been formed in the same way, and on the west side of Grant "Road five acres, from six to eight feet deep have, in opposition to "strong remonstrance, been filled in expressly with a view to being "built over, and now buildings are being raised on it. Many "private individuals have had the ground on which to build their "houses, raised with this foul material, and the water of a tank "near Grant Road was spoilt last rains by the sweepings that "immediately before that season had been laid down to raise the "adjoining premises of a newly built house. Preparations, it is

"said, are being made for conveying the sweepings by Railway to "the Marsh between Coorla and Chimboor, but up to the present "time they are being used in the reclamation of ground on the "border of the Mandvee Section of the town."

I also refer to the following extracts from the report of Mr. H. Conybear, which are an interesting record and show how strong is the tendency of certain low-castes and the lowly to concentrate in certain localities :—

Pages 56 and 57—

	Rs.	a.	p.
"20th February 1850.—Abating the nuisances in the rear of Kamathipura and Oomercarry sewer between Grant and Bellasis Roads	2,581	9	9
"9th July 1850.—Raising, levelling, and draining the unmade Road, traversing the centre of the suburb of Kamathipura	2,909	0	0
"31st May 1851.—Constructing a Road from the Grant to the Bellasis Roads	2,013	4	0"

Appendix H, page 25, para. 113—

In my letter No. 105 of 1852, I stated "the majority of bad smells "perceivable on the Flats between Wadington's Bridge and the "Bellasis Road were to be attributed to the low-caste and filthy "habits of the inhabitants of a neighbourhood, the surface of which "is on an average about 5 feet below high water mark spring tides "whereby its drainage was rendered difficult and imperfect" * * * "that it could not be expected that any town containing half a "million of people can be without a dirty quarter ; and this is "particularly the case in India, where the connection of caste has "a tendency to concentrate sweepers and others of low-castes in one "locality. Municipal improvements can only provide the means of "cleanliness to those who are willing to avail themselves of them, "and the inhabitants of Kamathipura are not so.

Appendix H, page 27, para. 120—

"It is also objected that the erection of public necessaries has "had no sensible effect in diminishing the nuisance occasioned by "the non-observance of article XV, Regulation III of 1815, an in-"stance of which is afforded by the fact of there being no locality in "the Island more abused in this way than the open ground immedi-"ately adjoining the public necessary at Kamathipura."

The petitioners admit that there are certain places in Kamathipura which form "exceptions" to their assertions that no deposit of kutchra could be found. Although excavations to the depth of 10 feet in certain places might not show refuse deposits, it does not disprove the fact of there being refuse below that level. I do not believe that the existence of the night-soil depôt has any ill effect on the health of the people living in its immediate vicinity, and it certainly can have none on the health of the district as a whole. There is no collection of filth allowed to accumulate in the depôt. The night-soil is disposed of at the time it comes to the depôt. In regard to the House-

connections and the new Pipe Sewers of the district, I am glad to see the petitioners admit defective management in their daily use. A person has only to see the way in which the drainage connections are misused by the people ; refuse of every description is thrown from the windows into the gullies and the connections speedily become obstructed. The house-owners and their tenants are equally indifferent as to the consequences of their carelessness. Kamathipura is kept as clean as any other part of the city, but the poor people are not as clean as in many other parts of the city. As I have before pointed out, all the subjects of objection and fault are either directly Municipal or connected with the Municipality—The Municipal Night-soil Depôt, the Municipal Drains, the Municipal Halalkhor Barracks, the Private Chawls occupied by Municipal biggaries, the Municipal Ward and Milch Cattle Stables, the Municipal Tank, the Municipal Hospital—not a word is said about a certain street or streets inhabited by a certain class of persons who, with their many parasites and dependents, form no small part of the population, a street or streets like which none so bad can be found in any other district than Kamathipura, but all except Municipal servants may live in Kamathipura. Nothing is said of the large poor low-caste population whose houses are fearfully overcrowded and ill-ventilated. Nothing is said of blocks of houses built up against each other, with no gullies or open space between them. Nothing is said that no sooner are streets and gullies swept clean than refuse of all kind is thrown out. Nothing is said of the cart-loads of decayed *beedee* leaves thrown on to the streets at all hours. No reason is given why a large number of very useful Municipal servants—public servants and without whom the sanitary services of the City could not go on—are not to be residents of Kamathipura. The Municipality is to be denied the right to lodge its servants in localities which are considered the most convenient and most suitable in the interests of the public convenience. If the sanitary condition of Kamathipura is to be improved, there must be co-operation on the part of the inhabitants and the landlords of properties. Apart from an improved system of drainage, it is impossible to do more for the abatement of the baneful effects of foundations laid over refuse. Much may be done to improve the drainage system. Establishment is necessary—more men to clean gullies and gully-traps and drain connections, a steam engine to flush gullies, more carts and bullocks to effect speedier removal of refuse. It is a remarkable incident that the petitioners have not objected to a building, the purposes of which of all others one would have thought they would have objected to, that is, the Morgue. It is very remarkable that while the buildings not used as a Small-pox and Cholera Hospital since 26th July 1892 are objected to, yet the Morgue is not condemned. The Morgue has an excellent garden, but so have the buildings used as a Small-pox and Cholera Hospital ; but while there are two, and there may be more, Small-pox and Cholera Hospitals in different portions, there is only one Morgue in the city in Kamathipura.—T. S. WEIR, Health Officer.

Proposed by Grattan Geary, Esq., seconded by G. W. Roughton, Esq.—

No. 12227. "That the report of the Sub-Committee appointed to inquire into the complaint from Mr. Nursingrao Syboo and others be approved and adopted, and that the same be forwarded to the Corporation as the report of the Committee, together with the accompaniments to the report."

Carried.

Considered the Progress Reports, up to the end of December 1893, of new works now in course of construction.*

No. 12228. *Resolved*: "That the progress report of new works in course of construction up to the end of December 1893, be *recorded*."

No. 12229. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 19556, dated 21st December last, sanction be given, under section 216 of the Municipal Act, to the writing off of Rs. 928-12-5, being the amount of irrecoverable bills for rates and taxes as per list submitted with the Commissioner's letter."

The further consideration of the following was postponed till next week:—Letter No. 23378, dated 31st ultimo, from the Commissioner, on the subject of the recovery of the rates and taxes due by the late Eastern Electric Light and Power Company.

No. 12230. *Resolved*: "That, with reference to petitions from Messrs. Sorabji Edulji Ginwalla, Hormusji Framji Oodwaree and others, complaining of the alleged nuisance caused by the open gutter near the Merwanji Framji Panday Dharamsala at Karelwadi, the Corporation be referred to the Commissioner's letter to the Secretary, No. 23941, dated 7th instant, stating that the cause of complaint will be removed by the orders which have been issued for extending the southern foot-path of Thakordwar Road westward, and covering over the rest of the side drain abutting on the Dharamsala."

No. 12231. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 23766, dated 5th instant, sanction be given, under sections 211 and

* *See* Appendix D.

517 (1) (*j*) of the Municipal Act, to a suit being filed in the Court of Small Causes against Mr. Dyer for the recovery of Rs. 11-8-0, being the amount of wheel tax bill and notice fee due by him for the fourth quarter of 1892-93."

Read the following letter No. 12160 of 1893-94, dated 13th instant, to the Chairman of the Standing Committee :—

SIR,—I am requested by the Committee appointed by the Corporation on the 25th January last, as per margin, to ask that the Standing Committee will recommend the Corporation to make a grant of Rs. 500, for the purpose of defraying the expenses of the travelling from and to Calcutta, and residence in Bombay for about 10 days of the Superintendent of the Zoological Gardens, Calcutta, whose services have been kindly placed at the disposal of the Committee by the Zoological Society of Calcutta for the purpose of advising on the whole question of the proposed improvement of the zoological collection in the Victoria Gardens. As the Society are prepared to sanction the Superintendent's visiting Bombay next month, the Committee will feel obliged by the Standing Committee placing this application before the Corporation as a matter of urgency at the earliest possible date.—I have, &c., S. O'B. BANKS, Chairman.

"That a Committee consisting of the following gentlemen be appointed to consider and report on the question of the proposed improvement of the zoological collection in the Victoria Gardens :—Dr. Banks, Dr. Bhalchandra K. Bhatawadekar, Mr. Rebsch, Mr. Shroff, Mr. Ibrahim Rahimtula, Dr. Katrak, Dr. Maconachie, the Hon'ble Mr. Javerilal U. Yajnik, and the Commissioner.

No. 11221.

Resolved : "That letter, dated 13th instant, from the Chairman of the Committee appointed by the Corporation to report on the question of the proposed improvement of the zoological collection in the Victoria Gardens, be forwarded to the Corporation, with a recommendation that sanction be given to the grant of Rs. 500 to the debit of the garden fund, to meet the expenses to be incurred by the officer of the Calcutta Zoological Society in attending in Bombay to advise the Committee.

No. 12232.

"That the Corporation be asked to consider this recommendation as urgent business under section 36 (*l*) at their next meeting to be held on Monday, the 19th instant."

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 24379, dated 13th instant, sanction be given to the transfer of Rs. 471-1-5 from savings in the grant for conservancy

No. 12233.

branch, III, disposal of town sweepings (earth to cover cutchra deposits), to refund and audit office establishment, to meet acting allowance payable during the absence of the Revenue Officer on privilege leave."

No. 12234. *Resolved* : " That, as applied for by the Commissioner, in his memorandum No. 24345, dated 12th instant, sanction be given to the payment of Rs. 55-8-0, to the debit of the grant for election expenses, to meet the allowance to the staff employed in connection with the election held on the 22nd ultimo."

The following return was read and *recorded* :—

No. 12235. Return of fires at Balaram Street, Colaba, Elphinstone Road (Parel), and Chuna Bhathi, forwarded with the Commissioner's memorandum No. 23804, dated 5th February 1894.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 11th February 1894.

No. 12236. *Resolved* : " That the following be *recorded* :—Letter No. 24477, dated this day, from the Commissioner, reporting that he has accepted the tender of Messrs. Hassanalli Mulla Hakimji & Brothers, the lower of the two tenders received, for the supply of 500 kerosine oil lanterns at Rs. 3-13-0 per lantern and that he has sanctioned the extension of the time for the delivery of the lanterns from 6 weeks to 10 weeks."

No. 12237. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 24473, dated this day, sanction be given to the acceptance by him of the tender of Mr. Fazulbhai Peerbhai for the supply of sandstone, sea-sand, shingle, shells, Thana sand, murum, yellow earth and red earth during 1894-95 at the following rates :—

Item.	Office rate.	Per	Tendered rates.
1. Sandstone quarried without the limits of the Island of Bombay ...	Rs. a. p. 7 10 0	100 ft.	Discount at Rs. 7 4 0 per cent.
2. Sea-sand	12 0 0	,,	,, 16 0 0 ,,
3. Shingle	12 0 0	,,	,, 16 0 0 ,,
4. Shells	15 0 0	,,	,, 7 0 0 ,,
5. Thana sand	9 8 0	,,	,, 8 0 0 ,,
6. Murum	3 0 0	,,	,, 3 0 0 ,,
7. Yellow earth	3 12 0	,,	,, 6 0 0 ,,
8. Red earth	7 0 0	,,	,, 7 0 0 ,,

* *See* Appendix C. † *See* Appendix B.

Resolved : "That, as applied for by the Commissioner, in his letter No. 24470, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Sullemanji Mulla Abdulali & Co., the lowest of the three tenders received, for the supply of petty stores during 1894-95 at schedule rates, 6 per cent. below the rates fixed by the Executive Engineer."

No. 12238.

Resolved : "That, as applied for by the Commissioner, in his letter No. 24469, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Sullemanji Mulla Abdulali & Co., the lowest of the three tenders received, for the supply of timber during 1894-95 at schedule rates, 5 per cent. below the rates fixed by the Executive Engineer."

No. 12239.

Resolved : "That, as applied for by the Commissioner, in his letter No. 24468, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Sullemanji Mulla Abdulali & Co., the lowest of the four tenders received, for the supply of hardware during 1894-95 at schedule rates, 7½ per cent. below the rates fixed by the Executive Engineer."

No. 12240.

Resolved : "That, as applied for by the Commissioner, in his letter No. 24350, dated 12th instant, sanction be given to the acceptance by him of the tender of Messrs. Ruttonji Bezonji & Co., the lowest of the four tenders received, for the construction of the market at Colaba at a cost of Rs. 40,466-6-6. The amount, together with 10 per cent. for contingencies and establishment on the estimated amount of the work, *viz.*, Rs. 4,572, total Rs. 45,038-6-6, to be met out of the available balance of Rs. 50,043-13-4 from the sanctioned grant for the construction of the market."

No. 12241.

BOMBAY, 21*st February* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.

E. B. CARROLL, Esq., M.I.C.E.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; the EXECUTIVE ENGINEER; and the SECRETARY.

The minutes of the meeting held on the 14th instant were signed.

No. 12507. The seal of the Corporation was affixed to deed of contract with Messrs. Dadabhai Hormasjee & Co. for the supply of 250 tons of Cardiff coal and 250 tons of West Hartley coal.

No. 12508. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 25186, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 12509. *Resolved* : "That, as applied for by the Commissioner in his letter No. 24600, dated 5th instant, sanction be given to the transfer of Rs. 12-12-4, from savings in the grant for miscellaneous drainage, 1, establishment, to the grant for purchase of a donkey pump for Love Grove Pumping Station, to meet excess on the last-mentioned grant on account of the fall in exchange on London."

No. 12510. *Resolved* : "That the question of the acceptance of the tender of the *Bombay Gazette* Press for the execution of the printing work of the Municipality during the ensuing year be referred to a Sub-Committee, consisting of the Hon'ble Mr. R. G. Oxenham, Mr. Shroff and Mr. Roughton."*

No. 12511. *Resolved* : "That letter No. 24528, dated 14th instant, from the Commissioner, to the Secretary, be forwarded to the Corporation with reference to their resolution No. 4459, dated 7th August last, and with the recommendation that sanction be given to the payment of Rs. 18-12-0 additional, as the area of land actually acquired on the west side of Vehar Lake is nine acres and one guntha instead of eight acres and thirty gunthas as defined in that resolution. The cost to be met from unappropriated surplus balance."

No. 12512. *Resolved* : "That, with reference to the Committee's resolution No. 12511 of this day's date, and subject to the recommendation therein contained being sanctioned by the Corporation, sanction be given to the variation of the terms of the purchase of 9 acres and 1 guntha of land on the western side of Vehar Lake, whereby the teak trees belonging to Government under the Land Revenue Code shall be excluded from the purchase."

* The name of Mr. Roughton was inserted on the suggestion of the Hon'ble Mr. Javerilal U. Yajnik.

Read letter No. 24944, dated 19th instant, from the Commissioner to the Secretary, as under:—

SIR,—In reference to the resolution of the Standing Committee, No. 12217 of the 14th instant, I have the honor to report that the amount reserved in the Budget for 1893-94 for sundry pensions, gratuities, &c., to be paid up to the end of the current financial year is Rs. 6,041-3-0. The following are the details explaining the excess:—

Pension sanctioned to—Mr. T. D. Oliveira, at Rs. 37-8-0= Rs. 450-0-0; Hari Dewji, Rs. 4-0-0=Rs. 50-6-10; Mr. Dadabhoy Bapuji, Rs. 35-6-8=Rs. 389-9-4; Mr. P. C. Higgins, Rs. 350-0-0=Rs. 2,790-0-0; Mr. Samuel Reuben, Rs. 50-0-0= Rs. 461-4-8; Mr. Cashinath Lakshman, Rs. 9-0-0=Rs. 102-7-9; Mr. C. J. Hewett, Rs. 150-0-0=Rs. 750-0-0; Sayed Hoosein, Rs. 6-8-8=Rs. 45-12-6; Mr. Dadaji Bhanaji, Rs. 105-0-8= Rs. 420-2-8; Mr. Jagannath Vithoba, Rs. 20-0-0=Rs. 80-0-0. Total Rs. 5,539-11-9. *Pensions to be sanctioned in favor of*—Mr. Cursetjee Dhunjibhoy, Rs. 62-8-0=Rs. 250-0-0; Mr. G. Moore, Rs. 45-3-9= Rs. 181-0-0. Total Rs. 431-0-0. *Compassionate allowances already paid*—Rs. 3,616-1-5. *Compassionate allowances to be paid to*—the widow of Mr. Framjee Maneckji, a clerk in the Chief Accountant's Office, Rs. 900-0-0; the widows of Mr. Rahamin Solomon, Rs. 1,200-0-0; the widow of Sadoo Pandu, a peon in the Water Works Department, Rs. 144-0-0. *Gratuity to be paid to* Babajee Ganu, a peon in the Commissioner's Office, Rs. 120-0-0. Total Rs. 11,950-13-2. Deduct the amount reserved, Rs. 6,041-3-0. Total excess Rs. 5,909-10-2, or, in round figures, the total excess amount to be transferred may be taken at Rs. 5,925 instead of Rs. 5,700 given in the transfer statement.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved: "That letter No. 24944, dated 19th instant, from the Commissioner to the Secretary be *recorded*.

No. 12513.

"That, as applied for by the Commissioner in his memorandum No. 23930, dated 7th idem, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 5,925 from savings in the grant for (*a*) general supervision, I, salary of the Executive Engineer, III, Surveyors and Draftsmen, (*b*) Joint Schools Committee Establishment, (*c*) charges on account of loans, commission to Bank of Bombay for payment of interest, to the grant for pensions and gratuities and compassionate allowance, to meet excess due to the additional number of employés who retired on pension during 1893-94, and to grants for compassionate allowance payable to the families of employés who have died in the Municipal service."

Resolved: "That the following be *recorded* :—

No. 12514. Letter No. 24877, dated 17th instant, from the Commissioner, withdrawing memorandum No. 24271, dated 12th idem, requesting sanction to the transfer of Rs. 2,000, to meet repairs to old and worn-out meat-vans, as the extra grant is not in reality required."

Resolved : "That the consideration of the acceptance

No. 12515. of tender for the supply of road metal be postponed until next meeting."

Resolved : "That, as applied for by the Commissioner

No. 12516. in his letter No. 24829, dated 17th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Brooks and Co. for the supply of 300 tons of Bengal Sanctoria coal, whereby the contract period shall be extended from 15th January to 2nd February 1894, the delay having been caused by the late arrival of the ship which brought the coal to Bombay."

Resolved : "That, as applied for by the Commissioner in

No. 12517. his letter No. 24826, dated 17th instant, the Committee approve of the 14th April 1894 being fixed as the date up to, and inclusive of, which refunds at 4 annas per candy on account of town duty on grain exported will be allowed, and of the publication of the following notice :—

"In consequence of the Municipal Corporation having reduced the rate of town duty to be levied on grain of all sorts during the year commencing on 1st April next from the existing annas 4 to annas 2 per candy, it is hereby notified that refunds of the duty will be allowed at the former rate on all grain exported up to and including the 14th April next, while in the case of all grain exported on and after the 15th idem refunds will be allowed at the new rate of annas 2 per candy."

Read the following :—

BOMBAY, 19*th February* 1894.

To H. A. ACWORTH, Esq., Commissioner.

SIR,—In reply to your letters Nos. 24074 of the 8th instant and 24816 of the 17th idem, upon the subject of the Rs. 5,000 deposited by the Eastern Electric Light and Power Company, Limited, and to the suggestion made by the Standing Committee that there was no one left who could be made a defendant in the suit, we have the honour to inform you that a suit is not contemplated in this case, but an application in the form of a motion to the court for the appointment of a person to give a discharge for the notes in question on behalf of the Company.—We have, &c.,

CRAWFORD, BURDER & Co.

No. 25092 OF *20th February* 1894.

Forwarded to the Municipal Secretary for the information of the Standing Committee in reference to this office letter No. 23378 of 31st January 1894 and the Standing Committee's Resolution No. 11952 of 17th February 1894.

H. A. ACWORTH, Commissioner.

No. 12518. *Resolved* : " That, as applied for by the Commissioner in his letter No. 23378, dated 21st ultimo, and his memorandum No. 25097, dated 20th instant, sanction be given, under section 517 (1) (*j*) of the Municipal Act, to an application being made by him to the High Court for an order authorising the sale of the Electric Light and Power Company's deposit of Rs. 5,000 in Government paper lodged in connectoin with their agreement of 1883 in order that the Corporation may be enabled to draw the interest which has accrued on the deposit and sell the paper in satisfaction of the Municipal bills for taxes and various other charges amounting to Rs. 3,674-1-0 outstanding against the Company."

No. 12519. *Resolved* : " That, as applied for by the Commissoner in his letter No. 24399, dated 13th instant, sanction be given, under section 91 of the Municipal Act, to his applying to Government to acquire, under the Land Acquisition Act, for the improvement of Matharpakadi, the properties forming portions of buildings shewn in red on the tracing (marked " A," dated this day, and filed in supplement to minute books) ; the cost to be charged to the grant for the improvement of the road."

No. 12520. *Resolved* : " That, as applied for by the Commissioner in his letter No. 24474, dated 14th instant, to the Secretary, and subject to the approval of the Corporation under section 133 (2) of the Municipal Act 3 of 1888, sanction be given to the transfer of Rs. 2,225-14-0, from savings in the contingent grants for the undermentioned works in connection with the fittings of the new Municipal Office, to meet excesses over the contract rates for the works payable to Messrs. Richardson and Cruddas :—

	Rs.	a.	p.
Water supply	545	13	1
Surface drainage...	141	8	5
Electric lighting...	869	15	6
Fire-and-thief-proof doors, strong room	668	9	0
Total...	2,225	14	0 "

Resolved : "That the following be *recorded* :—Letter
No. 12521. No. 24534 of the 14th instant, from the Commissioner, reporting that he has allowed Mr. Bhojabhoy Allarakhia, the Hay Contractor for the next year, to continue in the occupation of Municipal ground measuring 980 square yards on the Flats for stacking hay for one year from 18th January last, on payment of Rs. 80 for the period."

Resolved : "That letter No. 24608, dated 15th instant,
No. 12522. from the Commissioner to the Secretary be forwarded to the Corporation, with a recommendation that sanction be given to the refund of Rs. 333-5-4, being the amount of one month's rent to Mr. Bissessor Bindraban for the period he was disallowed the use of Municipal ground at Tardeo pending the provision of fire hydrants on the spot."

Considered letter No. 24498, dated 14th instant, from the Commissioner to the Secretary, as under :—

SIR,—By their resolution No. 1232 of 11th May 1892 the Standing Committee sanctioned an application being made to Government for the acquisition under the Land Acquisition Act of two plots of land, each measuring about 1,000 square feet, which form portions of properties belonging to Mr. Janardhan Purshotamji and Purshotam Madhowji respectively in the village of Worli for the construction of two latrines for the use of the residents of the village. Steps were accordingly taken to acquire the land. At the enquiry before the Collector of Bombay, however, the owners of the plots strongly protested against the Municipality purchasing only portions of their ground, as by the erection of latrines thereon the remaining portions would be rendered useless, and the Collector expressed an opinion that, if only portions of the plots be taken up, he would have to award a larger rate than if the whole of the plots were taken up. I therefore think that it would be to our interest to purchase the whole of the plots, one of which measures 1,329·86 and the other 560 square yards : total 1,889·86 square yards. The portion of the ground remaining after allotting the necessary space for the latrines can, the Executive Engineer states, be used for keeping the Health Department carts and for road department purposes. I have therefore to request the sanction of the Standing Committee to my applying to Government to acquire the whole of the plots.—I have, &c.,

H. A. ACWORTH, Commissioner.

Resolved : "That, as applied for by the Commissioner
No. 12523. in his letter No. 24498, dated 14th instant, and with reference to the Committee's resolution

No. 1232, dated 11th May 1892, sanction be now given, under section 91 of the Municipal Act, to his applying to Government to acquire under the Land Acquisition Act 1,889·86 square yards, or thereabout, of ground, the property of Messrs. Janardhan Purshotumjee and Purshotum Madhowjee, required as sites for the erection of two 12-chambered latrines in the village of Worli and for other Municipal purposes. The cost to be met from the Budget grants for 1893-94, of Rs. 3,010 and Rs. 2,240, new works."

No. 12524. *Resolved:* "That, with reference to their resolution No. 11645, dated 1st instant, the Corporation be recommended to sanction the grant of Rs. 1,727 to the debit of unappropriated cash balance, to meet the amounts payable to various officers and servants of the Health Department for their services during the riots, August 1893, as under :—

"Inspector T. Glover, Rs. 250 ; Inspector A. Hallums, Rs. 250 ; Inspector J. M. Desmier, Rs. 175 ; Inspector J. Powell, Rs. 225 ; Inspector J. Ringrow, Rs. 200 ; Inspector A. P. Dawes, Rs. 175 ; Inspector J. C. de Souza, Rs. 150 ; Sub-Inspector G. Webb, Rs. 70 ; Sub-Inspector W. H. Harris, Rs. 70 ; Sub-Inspector W. R. Mowforth, Rs. 70 ; Sub-Inspector Kanoba Bahiroba, Rs. 25 ; Stable Mucadam Tookaram Ziloo, Rs. 15 ; Stable Mucadam Raghoo Babaji, Rs. 15 ; Section Mucadam Shaik Ali Ismail, Rs. 12 ; Cemetery Clerk Banekhan Manwarkhan, Rs. 25."

No. 12525. *Resolved* : "That the following be circulated and brought on for consideration at a future meeting:— Letter No. 24472, dated 14th instant, from the Commissioner, forwarding Mr. Stevens' claim for fees in connection with the new Municipal Office building."

No. 12526. *Resolved:* "That, as applied for by the Commissioner in his letter No. 24475, dated 14th instant, sanction be given to the re-distribution of the establishment for the sewerage of Umerkhadi, as under, in lieu of the establishment entered at page 76 of the Budget for 1894-95, *viz.*, 1 Surveyor at Rs. 80 ; 1 do. at Rs. 75 ; 1 do. at Rs. 70 ; 1 do. at Rs. 60 ; 1 Draftsman at Rs. 20 ; 1 Clerk, Accounts, at Rs. 50 ; 1 Clerk, Copying, at Rs. 25 ; 3 peons at Rs. 8 each, Rs. 24 ; 9 lascars at Rs. 10, Rs. 90 : Rs. 494."

No. 12527. *Resolved:* "That, as applied for by the Commissioner in his memorandum No. 24471, dated 14th instant, the Committee approve of the leasing

of the Arthur Crawford Market scales to Mr. Rahmanbhai Hooseinbhai for a period of 1 year only on payment of Rs. 4,100."

No. 12528. *Resolved* : "That, as applied for by the Commissioner in his letter No. 24352, dated 12th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Hughes & Lancaster for works in air-compressing machinery for the sewerage of Colaba, whereby an advance of Rs. 28,000 may be made to them on account of the pipes delivered, amounting in value to Rs. 46,666."

No. 12529. *Resolved*: "That, as applied for by the Commissioner in his letter No. 24351, dated 12th instant, and under the Pension Regulations, sanction be given to the payment of Rs. 900 as compassionate allowance to Bai Rupabai, widow of Mr. Framjee Manockjee, late clerk in the Chief Accountant's Office, and such of her children as are of age and entitled to receive the same."

No. 12530. *Resolved*: "That, as applied for by the Commissioner in his letter No. 24349, dated 12th instant, sanction be given to a suit being filed in the Court of Small Causes against Mr. Ramji Bhiwaji Thale for the recovery of Rs. 87-8-0, being the amount of rent of Municipal ground occupied by him in Agripada."

No. 12531. *Resolved* : "That the following be forwarded to the Commissioner for favour of report :—Letter, dated 15th instant, from Mr. Sundernath D. Khote, on the subject of the construction of a new road at Walkeshwar in continuation of Dongarsi Road, Malabar Hill."

No. 12532. *Resolved* : "That the following be forwarded to the Commissioner for disposal :—Letter, dated 13th instant, from Bai Rajooma Noorbibi, on the subject of buffalo stable at Mahim."

No. 12533. *Resolved* : "That, in reply to their application, dated 18th instant, Hadji Mahomed and others be informed that the Standing Committee have no power to exempt them from the payment of Municipal taxes that may be legally due by applicants."

No. 12534. *Resolved* : "That the following be laid on the table :—Letter, dated 17th instant, from Messrs. Ardaseer Framjee Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements

of receipts and disbursements up to the end of each week for the month of January last and compared them with the general and subsidiary ledgers and journals and found them correct. Forwarding the usual summary and statements of their scrutiny of accounts."

The following return was read and *recorded* :—

No. 12535. Return of fires at Cavel Street (Kalbadevi Road), 41, Frere Road, Fanaswadi, Pinjari Gully (Abdul Rahman Street), Kamathipura 2nd Lane, Middle Pakhadi (Worli) Abdul Rahman Street, and Thomas Street (Lower Colaba), forwarded with the Commissioner's memorandum No. 24609, dated 15th February 1894.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 18th February 1894.

No. 12536. *Resolved* : "That, with reference to the demand for arbitration on the part of the Tramway Company, in respect of the Commissioner's claim to assess that Company for occupation of land by their tracks, the Standing Committee approve of the Commissioner's proposal to select Mr. J. Anderson, barrister-at-law, as arbitrator on the part of the Municipality."

No. 12537. *Resolved* : "That, as applied for by Commissioner in his letter No. 25115, dated 20th instant, and in supercession of the Committee's resolution No. 12215 of 14th idem, sanction be given to the purchase of 800 casks of Booth's cement from Messrs. Garlick & Co., at Rs. 7-10-0 per cask of 400 lbs. gross.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders which would otherwise be necessary, as having regard to the rate of exchange on London, there is no likelihood of a more reasonable offer being received."

No. 12538. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 25076, dated 20th instant, sanction be given to the transfer of Rs. 163 from savings in the grant for I, establishment, Fire Brigade Budget, to same department, I, pension contribution payable to Government, to meet excess on the latter head due to insufficient budget provision."

* *See* Appendix C. † *See* Appendix B.

BOMBAY, 28*th February* 1894.

AT the meeting of the Standing Committee held this day, there were present:—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; HURKISONDAS NURROTUMDAS, Esq.; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S. H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 21st instant were signed.

The seal of the Corporation was affixed to (1) deed of contract with Messrs. Macbeth Bros. for the supply and erection of a Green & Co.'s economizer, connection pipes and a thermometer at the Love Grove Pumping Station; (2) to deed of agreement with Messrs. R. Ramchander & Co. for the supply of disinfectants during 1894-95.

Resolved: "That the following be *recorded*:—Sanction of the Standing Committee given by circular, dated 23rd instant, to the acceptance of Mr. Grattan Geary's tender for the performance of the printing work of the Municipality during 1894-95." No. 12773.

The seal of the Corporation was affixed to the said printing contract.

Proposed by the Hon'ble Mr. R. G. Oxenham, seconded by K. M. Shroff, Esq.—

"The Committee records its appreciation of the satisfactory manner in which the work of printing for the Municipality has been done for the last 17 years and its regret that the terms offered do not allow the Committee to sanction a further continuance of the contract in view of the duty of the Committee as trustees of public money. No. 12774.

"That copy of this resolution be forwarded to the proprietors of the *Times of India* press."

Carried.

Resolved: "That, as applied for by the Commissioner in his memorandum No. 25873, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith," No. 12775.

Resolved : " That letter No. 25340, dated 22nd instant, from the Commissioner, be forwarded to the Corporation with the recommendation that sanction be given to the expenditure of Rs. 618 for cost of paving with Indian patent stone, 1,500 square feet of compound of the Health Department Stables, Kamathipura, with a view to it being ascertained whether the stone is suitable for the purpose. The cost to be debited to savings in the grant for the extension of Khandia Street."

No. 12776.

Read the following :—

No. 16298 OF 1893-94.

BOMBAY, 27*th February* 1894.

TO THE COMMISSIONER.

In continuation of this office No. 15585 of the 15th instant, and referring to the discussion at the last meeting of the Standing Committee, I have the honour to state that Messrs. Vishnu Narsingrao & Co. are the contractors who, after tendering for the supply of metal for the current year, declined to execute the contract. The next lowest tenderers are Messrs. Jamasjee Ratanjee Mistry & Co., at Rs. 5-10-9 per brass of 100 cubic feet. They are now doing the work of the new Health Department stables at Dadar satisfactorily, but I do not think they have any experience of the work of supplying road metal. I asked these contractors and also Mr. Sorabjee Nowrojee Moosa to come and see me on the subject of their tenders. Mr. Moosa saw me and has reduced the rate from Rs. 5-14-0 to Rs. 5-11-0 per brass. Messrs. Jamasjee & Co. did not come, which shows that they are not anxious to get the contract. I beg therefore to recommend that the tender of Mr. Sorabjee Nowrojee Moosa at Rs. 5-11-0 per brass be accepted. Mr. Moosa has, I understand, carried out Municipal works satisfactorily before and is quite capable of doing this work.—I have, &c.,

M. C. MURZBAN, Executive Engineer.

No. 25860 of 28*th February* 1894.

Forwarded to the Standing Committee.

I have no objection to recommending Mr. Sorabjee Moosa's tender at Rs. 5-11-0.

H. A. ACWORTH, Commissioner.

No. 12777. *Resolved* : " That, as applied for by the Commissioner in his memorandum No. 25860, dated this day, sanction be given to the acceptance by him of the tender of Mr. Sorabjee Nowrojee Moosa for the supply of road metal during 1894-95 at Rs. 5-11-0 per brass of 100 cubic feet."

No. 12778. *Resolved* : " That, as applied for by the Commissioner in his letter No. 25220, dated 21st instant, sanction be given, under section (69) (*e*) of the Municipal Act, to the variation of the contract with Messrs. Walsh Lovett & Co. for the supply of water meters, whereby the contract period be extended to 23rd November 1893."

No. 12779. It was agreed that the following be circulated and brought on for consideration at a future meeting :—Letter No. 25059, dated 20th instant, from the Commissioner, requesting sanction of the Standing Committee and Corporation to the expenditure of Rs. 6,161 for certain additional articles of furniture required and for certain alteration of furniture in connection with the Municipal Office. The amount to be met out of the savings in the grant for the office furniture, fittings, &c.

No. 12780. *Resolved* : " That, with reference to the Committee's resolution No. 7860 of 15th November last, and as applied for by the Commissioner in his letter No. 25350, dated 22nd instant, sanction be given to the continuance of Messrs. Sorabjee Shapurjee & Co.'s contract for the supply of castings during 1894-95 at the following rates :—

	Rate per cwt. of castings (patterns supplied by the Municipality).	Rate per cwt. of castings (patterns made by the contractors).	Lome castings.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Iron castings weighing up to ¼ cwt. ...	6 0 0	Same rate as in the previous column. Patterns to be charged at cost price extra.	7 0 0
Do. do. over ¼ to 1...	6 0 0		7 0 0
Do. do. do. 1 „ 5...	5 0 0		6 0 0
Do. do. do. 5 „ 10...	4 14 0		5 14 0
Do. do. do. 10 „ 20...	4 12 0		5 12 0
Do. do. do. 20 „ ...	4 8 0		5 8 0
Do. Fire bars in quantities not less than 10 cwts.	4 8 0		5 8 0

For facing flange pipes, and drilling holes at the following rates :—

2″	Pipe Flange, at	Rs.	1	0	0	each flange.	
3″	do.	„	1	0	0	„	„
4″	do.	„	1	8	0	„	„
5″ & 6″	do.	„	2	0	0	„	„
7″ & 8″	do.	„	2	8	0	„	„
10″ to 12″	do.	„	3	0	0	„	„
13″ to 16″	do	„	3	8	0	„	„
17″ & 18″	do.	„	4	0	0	„	„
19″	do.	„	4	8	0	„	„
20″	do	„	5	0	0	„	„
21″	do	„	6	0	0	„	„
22″	do.	„	7	0	0	„	„
24″	do.	„	8	0	0	„	„
26″	do	„	9	0	0	„	„
27″	do.	„	10	0	0	„	„
30″	do.	„	12	0	0	„	„
32″	do.	„	15	0	0	„	„
Drilling holes	$\frac{5}{8}$″	dia., at	anna	1		each hole.	
„ „	$\frac{3}{4}$″	„ at	annas	1½		„	
„ „	$\frac{7}{8}$″	„ „		2		„	
„ „	1″	„ „		2½		„	

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the issue of invitation for tenders which would otherwise be necessary, as the Commissioner reports that these rates are favourable and, with one or two exceptions, lower than those formerly paid for similar work."

Carried.

No. 12781. *Resolved* : "That, as applied for by the Commissioner in his letter No. 25658, dated 26th instant, the Committee approve, under section 381 of the Municipal Act, of the service of notice on Mr. Kasam Jamal requiring him to fill in with earth his low-lying ground in rear of Municipal land at Foras Road."

No. 12782. *Resolved* : "That memorandum No. 25633, dated 26th instant, from the Commissioner, forwarding statement of houses or portions of houses which fell during the month of January last, as under, be *recorded.*"

No.	Ward.	Street No.	Locality.	Names of Owners.	Description of Buildings.	Date of erection (if known).	Date of fall.	Cause of fall.	Part fallen.	Casualties. Persons injured.	Casualties. Persons killed.	Estimated loss.	Whether or not action taken by the Municipality.	Whether or not warning given to the parties.	Remarks.
1	E	18 22	Kamattipura Bazar Road.	Haji Esmal Jan Mahomed.	House ...	About 30 years.	1894. 25th Jan.	Want of proper support to the purling; while the post supporting it was being renewed.	Roof on the west side.	1	Nil.	Rs. 400	Notice Feb ruary 1894, under sec tion 354, was served on the owner.	No. 211, dated 1st	
2	"	487 499	Upper Dun-can Road.	Lakhmidas Khimji & other executors of Jaitha Ludhani.	Flour Mill...	About 25 years.	28th "	Decay of the wood work in the framing of the wall.	Two bays of the west side from the first floor above,	Nil.	"	500	Notice Feb ruary 1894, under Section 354, was served on the owner.	No. 213, dated 3rd	

No. 16133 OF 1893-94.

Forwarded to the Municipal Commissioner for information.

M. C. MURZBAN, Executive Engineer.

23rd February 1894.

The following return was read and *recorded* :—

No. 12783. Return of fires at Gunpowder Road, Mazagon (Framji Petit Mill), Balaram Street, Tardeo Road, No. 5 Jamli Street (Mandvi), Lower Colaba (Bombay Cotton Press), forwarded with the Commissioner's memorandum No. 25477, dated 23rd February 1894.*

The following statement† was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 25th February 1894.

With reference to the Committee's resolution No. 12536 of 21st instant, approving of the selection of Mr. J. Anderson, barrister-at-law, as arbitrator on behalf of the Municipality in the case of the assessment of the Tramway Company for occupation of land by their trucks, the Commissioner now stated that Mr. Anderson is unable to act in the matter, as he is interested in the affairs of that Company. The Commissioner has, therefore, appointed Mr. G. H. Farran as arbitrator. The Committee approved of the Commissioner's action.

No. 12785. It was agreed that the consideration of the following be postponed till next week to enable the Commissioner to enquire into the Jewish law regarding plurality of wives :—Memorandum No. 25685, dated 27th instant, from the Commissioner, requesting sanction to the payment of Rs. 1,199 to Rabikabai and Dinabai, widows of the late Mr. Rahamin Solomon, audit clerk in the Chief Accountant's Office.

No. 12786. *Resolved*: " That, as applied for by the Commissioner in his memorandum No. 25684, dated 27th instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 5,300 from savings in the grant for conservancy (earth to cover Kutchra deposits), to same head, II, labour, B, surface drain cleaning, repairs to roads opened for drain cleaning, to meet excess on the latter head due to insufficient budget provision."

12787. *Resolved* : " That Ahmed Bapu, peon in the Secretary's Office, be informed that as the Medical Examiner reports that applicant is ineligible for the Pension Fund, he cannot be admitted to the benefits thereof."

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* *See* Appendix C. † *See* Appendix B.

Resolved : "That, as applied for by the Commissioner in his letter No. 25862, dated this day, sanction be given to the acceptance by him of the tender of Messrs. Dewram Keshowji & Co., the lowest of six tenders received, for the work of annual repairs during 1894-95, at schedule rates, showing discount 8¼ per cent. below the Executive Engineer's rates."

No. 12788.

Read letter No. 25765 of 27th instant, from the Commissioner to the Secretary, as under :—

SIR,—With reference to the provision of Rs. 1,056 for the establishment, as per margin, required for six months in connection with the works of screening chamber at Ghat-Kopar Siphon Head and flooring Bassein bridge, I have the honor to state that the Inspector was engaged during the period of six months already sanctioned in preparing drawings for strainers at Ghat-Kopar and for additional work at Bassein Creek bridge embankments and in supervising the alterations to the bridge at Ghat-Kopar and filling near Kurla Creek for pipe depôt. The works for which an Inspector is now required are (1) supervision of the construction of strainers at Ghat-Kopar in progress, (2) completion of the alterations at Ghat-Kopar bridge, (3) additional embankment at Bassein Creek bridge, and (4) flooring of Bassein bridge and culverts. But as the six months for which the services of an Inspector were engaged expired on 24th December 1893 and his services are required by the Engineer for a further term of six months from 25th idem in connection with the works above mentioned, I request the Standing Committee to recommend the Corporation to sanction the retention of the Inspector's services for the period above referred to and to the payment of his salary partly out of the savings of Rs. 726-7-3 in the provision for establishment sanctioned in the revised estimate for the Tansa Water Works and partly out of the contingencies for the works in connection with which his services are required.—I have, &c.,—H. A. ACWORTH.

1 Inspector ...	...Rs. 140
3 Lascars at Rs. 12 each ...	„ 36
Total Rs.	176 per month.

Resolved : "That, as applied for by the Commissioner in his letter No. 25765 of 27th instant, the Corporation be recommended to sanction the retention of the services of the Inspector in connection with the works of screening chamber at Ghat-Kopar siphon head, &c., for a further period of six months from 25th December last, the amount to be met partly out of savings in the provision for establishment sanctioned in the revised estimates for the Tansa Works and partly out of the contingencies for the works in connection with which the Inspector's services are required."

No. 12789.

BOMBAY, *7th March* 1894.

AT the meeting of the Standing Committee held this day, there were present :

COWASJEE HORMUSJEE, Esq., C.C.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK ; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq. ; THE HON'BLE MR. R. G. OXENHAM, M.A.; S. REBSCH, Esq., A.M.I.C.E. ; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S. H. A. ACWORTH, Esq., I.C.S., Commissioner ; and the SECRETARY.

The minutes of the meeting held on the 28th ultimo, were signed.

Resolved : " That Government Resolution No. 820, General Department, dated 6th instant, appointing Mr. S. Rebsch, A.M.I.C.E., a member of the Standing Committee, *vice* Mr. Grattan Geary resigned, be *recorded*."

No. 13202.

The seal of the Corporation was affixed to (1) deed of contract with Mr. Purbut Mowji, for the work of constructing a memorial arch at the Tansa Lake ; (2) ditto with Mr. Hasan Ally Abdoolali for the supply of stationery and drawing materials during 1894-95 ; (3) ditto with Messrs. Richardson & Cruddas for the supply of 11 hand rollers ; (4) ditto with Messrs. John Fleming & Co. for the supply of 1,000 solid steel pickaxes.

The seal was also affixed to 5 sub-divided debentures of the 35 lakhs various Sanitary Works Loan, bearing No. 4211-12 to 4219-20, of Rs. 1,000 each.

Resolved : " That, as applied for by the Commissioner in his memorandum No. 26470, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 13207.

Resolved : " That, as applied for by the Commissioner in his memorandum No. 26106, dated 2nd instant, and under the Pension Regulations, sanction be given to the payment of Rs. 120 as gratuity to Babuji Goonaji, peon in the Commissioner's Office, who is incapacitated for further service."

No. 13208.

With reference to the Committee's Resolution No. 12785 of the 28th ultimo, the Commissioner now read letters which he had received from Mr. David Solomon, Mr. Joseph Ezekiel and Mr. S. M. Moses, heads of the Beni-

Israel community, stating that there is no prohibition in the Jewish law against the marrying of two wives, and that the custom among Beni-Israel is of very long standing. Under the present law or custom, a Beni-Israel is not allowed to marry a second wife without the consent of the first one (which is naturally very difficult to obtain). If the first wife does not bear children for ten years after marriage, the husband is allowed to marry a second wife.

No. 13209. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 25685, dated 27th ultimo, and under the Pension Regulations, sanction be given to the payment of a compassionate allowance, not exceeding Rs. 1,199, to Rabikabai and Dinabai, widows of the late Mr. Rahamin Solomon of the Beni-Israel community, late audit clerk, Chief Accountant's Office."

No. 13210. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 26236, dated 3rd instant, sanction be given, under regulation 22 of the Pension Regulations, to the payment of a compassionate allowance, not exceeding Rs. 144, to A'wadibai, widow of Sadu Pandu, late Naik, Water Works Department."

No. 13211. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26327, dated 6th instant, sanction be given to the acceptance by him of the tender of Messrs. Littlewood, Palanji & Co., the lowest of four tenders received, for the work of widening embankments of the Tansa Duct near the Bassein Creek bridges, Kashele, at rates aggregating Rs. 7,349-4-0, including 10 per cent. contingencies, Rs. 8,084."

No. 13212. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 26235, dated 3rd instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 1,600 from savings in Conservancy, 10, Halalkhor branch, feed of bullocks, to same head, B, labour, to meet excess under that head."

No. 13213. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 25832, dated 28th ultimo, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 2,000 from savings in the grant

for conservancy, III., earth to cover cutchra deposits, to conservancy, 5, stores, miscellaneous, to meet excess on that head due to the purchase of one hand pump, Walshe's patent yoke leather sleeves and iron feeding troughs for bullocks."

Considered memorandum No. 26133, dated 2nd instant, from the Commissioner, forwarding memorandum No. 4464, dated 1st idem, from the Acting Chief Accountant, as follows :—

From the accompanying contrasted statement it will be observed that the separate grants provided in the Budget for 1893-94 for the supply of water to the different Municipal departments aggregate Rs. 1,38,652. This is inclusive of the additional grant of Rs. 2,500 sanctioned in the Corporation's resolution No. 11217, dated 25th January 1894. The actual charges debitable to such grants amount to Rs. 1,59,733-4-2 as detailed below: Total amount of bills as shown by the Assessor and Collector and as slightly amended by this office in pencil ... ...Rs. 1,60,563 15 7

Add bills for metre hire				„	1,123 3 4
Water tax bills in respect of Mr. Ibrahim Abdulla's chawls at Stable Street and Jairajbhoy Street rented for the Health Department biggaries, as the tax is payable by the Municipality under the lease				„	147 12 9
				„	1,61,834 15 8
Less charges for the supply of water at the following places debitable to contingent loan and C. grants as under :—					
D and E ward offices of the Assessment Department debitable to the contingent grant of that department .. ...Rs.	223	6	2		
D, E and G wards fire stations debitable to the Fire Brigade contingent grant ... ... „	440	10	0		
Victoria and Albert Museum debitable to the Museum contingent grant ... ... „	3	2	0		
Carried over ...	667	2	2		1,61,834 15 8

Brought forward...Rs.	667	2	2	Rs.	1,61,834	15	8
Municipal Workshops debitable to the shops stores and water supply grant ... ... „	1,104	6	0				
Cholera Hospital debitable to the infectious diseases grant ... „	302	0	0				
Drainage Chowki at Bhuleshwar, 2nd Bhoiwada Road, debitable to the grant for House Connections, 1, Drainage section ... „	8	1	4				
New Market at Foras Road debitable to the contingent allotment for the work ... ... „	16	14	0				
Municipal Workshops for the electric light boiler contingent allotment for the extra works in connection with the new Municipal Office building ... ... „	3	4	0				
				„	2,101	11	6
Net amount as shown in the accompanying statement ... ...Rs.					1,59,733	4	2

There is thus a net excess of Rs. 21,081-4-2 on the Budget provision.

2. Sanction of the Standing Committee and Corporation will be required to Rs. 8,054-0-3 of the excess, aggregating Rs. 29,135-4-5, under (1) Conservancy branch, 8, water supply and, 10, halalkhore branch, I, water supply; (2) market and slaughter-houses, II, water supply; and (3) cemeteries, 7, water supply, being met out of the savings on the allotments for water supply for (1) the different Municipal gardens, (2) miscellaneous drainage, (3) Love Grove pumping station, (4) sluices, (5) Mahaluxmi Dhobiwada, (6) Milch cattle stables ; and to the remaining excesses, aggregating Rs. 21,081-4-2, being met by an additional grant from the surplus revenue that will be derived by the adjustment of the bills for the departmental water supply.

3. The above excesses appear to be principally due to the larger consumption of water at the undermentioned places:—(1) The Health Department stables at Paltan Road ; (2) night-soil dopôts at Carnac and DeLisle Roads ; (3) Cochin Street latrines and Chawl ; (4) Bungies' chawl in Kursetji Suklaji Street ; (5) Bandora Slaughter Houses ; (6) Arthur Crawford and Foras Road Markets.

4. The consumption of water at Nos. 1 and 6 was exceptionally heavy, the value of water consumed at the former place having amounted to Rs. 11,620-10-0 against the estimate of Rs. 4,000, and that at the latter place having amounted to Rs. 12,413-6-7 against the estimate of Rs. 7,000.

5. I think it very necessary that the cause of this increased consumption of water should be explained by the departments concerned.

6. It is requested that the sanction of the Corporation to these excesses be obtained before the close of next month in order that this office may be enabled to adjust all the bills within the official year 1893-94, otherwise the bills will have to be carried forward as outstanding in the accounts for the ensuing year.

W. PEARSON, Acting Chief Accountant.

No. 26133 *of 2nd March* 1894.

Forwarded to the Municipal Secretary for favour of sanction of the Standing Committee and the Corporation to the excess being met as proposed by the Acting Chief Accountant.

H. A. ACWORTH, Commissioner.

No. 13214. *Resolved* : "That memorandum No. 26133, dated 2nd instant, from the Commissioner, be forwarded to the Corporation with the recommendation that the total excess on the Budget grants for water consumed for the Municipal purposes, principally by the Health Department, Rs. 29,135-4-5, be adjusted as follows:—Rs. 8,054-0-3 to the debit of the allotments for water supply for Municipal Gardens, miscelleneous drainage, Love Grove pumping station, sluices, Mahaluxmi dhobiwada, and milch cattle stables; Rs. 21,081-4-2 to the debit of unappropriated balance.

"That the Commissioner be asked to furnish the Standing Committee and the Corporation with the reasons for this excess consumption of water."

No. 13215. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26398, dated 6th instant, sanction be given to the filing of a suit in the Court of Small Causes against Mr. Ismaelji Suleman for the recovery of Rs. 55, being the balance of the bill due to the Municipal Solicitors for preparing and executing agreement in regard to the set-back by Mr. Ismaelji Suleman of his property in Guzar Street, Bhendi Bazaar."

No. 13216. *Resolved* : "That the following be *recorded* :—Letter No. 26239 of 6th instant, from the Commissioner, reporting that he has sanctioned the purchase from Messrs. Tylor & Sons, the sole makers of working parts for $\frac{3}{4}$" Rotary meters, of 75 fan and spindles, 25 toe pieces and cotton plates, and 40 dials and clock work, complete, at a cost of £ 49-10-0. The amount

will be debited to the grant for the purchase of materials, water works, during 1894-95. Stating that these fittings are required to repair meters in stock."

No. 13217. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26326, dated 6th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Walsh, Lovett & Co. for the supply of five sweeping machines and two scraping machines, whereby the number of scraping machines will be increased from two to five and the period of supply extended from two to three months."

No. 13218. *Resolved* : "That the following be referred to the Commissioner for report as to the probable cost that will be incurred in the matter :—

Resolution of the Corporation No. 12734, dated 26th ultimo, as under :—

That letter from the Commissioner, No. 19670, dated 22nd December 1893, to the Secretary, be *recorded*.

That the Commissioner be requested to give a trial to Mr. Ratnagar's apparatus for saving persons from drowning in any well selected by the Commissioner, and to report the result to the Corporation at the expiration of one year from this date.

That on the recommendation of the Standing Committee, the Corporation will be prepared to sanction the necessary outlay in the matter."

It was agreed that the further consideration of the following be postponed till next week :—Letter No. 24219, dated 10th ultimo, from the Commissioner, reporting the total charges imposed on the Corporation, owing to the new offices not being completed within the contract time.

No. 13219. *Resolved* : "That the following be *recorded* :—Letter No. 26037, dated 1st instant, from the Commissioner, reporting with reference to the resolution of the Committee, No. 12793, dated 17th February 1892 (sanctioning the leasing of Municipal ground as sites for Police chaukies), that as the Chaukie on the footpath, opposite the Arthur Crawford Markets was removed to Government ground on 14th November 1892, the proportionate amount of rent for the period from 15th November 1892 to 31st March 1893, which has been recovered, will be refunded to the Commissioner of Police."

Resolved : "That the following be *recorded* :—Letter
No. 13220. No. 26027, dated 1st instant, from the Commissioner, reporting that he has sanctioned the purchase of 16 counters from Messrs. Jost & Co., at a cost of Rs. 1,616, to the debit of the grant for stores section 4, D, road repairs. Stating that the counters are of great use in obtaining a fair estimate of the work done by steam rollers."

Resolved : "That the following be *recorded* :—Letter
No. 13221. No. 26035, dated 1st instant, from the Commissioner, reporting that he has sanctioned the purchase from Messrs. Latham & Co., of 135 enamelled iron street-name plates at Rs. 4-5-6 each, and of 100 zinc enamelled plates, each 24″×17¾″, embossed with the letters of the notice, under section 319 of the Municipal Act, for the partial closing of roads. The cost, Rs. 973-14-6, to be debited to the grant for the purchase of tin plates and street boards."

Resolved : "That the following be *recorded* :—Letter
No. 13222. No. 26102, dated 2nd instant, from the Commissioner, reporting that he has sanctioned the purchase of medicines and instruments required for the treatment of animals at the Victoria Gardens, from Messrs. Paranjpaye & Co., at a cost of Rs. 811-5-0 to the debit of the transfer of Rs. 2,450, sanctioned by the Corporation on 12th ultimo."

Resolved : "That, as applied for by the Commissioner
No. 13223. in his letter No. 25901, dated 28th ultimo, sanction be given, under section 216 of the Municipal Act, to the writing off of Rs. 538-15-9, being the amount of irrecoverable bills for taxes as per list submitted."

Resolved : "That with reference to petition, dated 2nd
No. 13224. instant, from Hadji Habib Mahomed and others, the Standing Committee beg to report that, in reply to a similar petition, addressed to themselves, they informed the petitioners, on 23rd ultimo, that the Committee have no power to exempt petitioners from payment of Municipal taxes, that may be legally due by them."

Resolved : "That the following be referred to the Com-
No. 13225. missioner for favour of report :—Letter, dated 27th ultimo, from Mr. Naronji Virji, on the subject of the disconnection of the water pipe of his house at Broach Street, Ward No. 5294."

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 4th March 1894.

No. 13226. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26257, dated 3rd instant, sanction be given to the acceptance by him of the tender of Mr. Ardasir Framji, the lower of the two tenders received, for repairing the embankment over the Tulsi main near Bandora, at rates aggregating Rs. 6,069-4-0, including 10 per cent. contingencies."

No. 13227. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26416, dated 6th instant, sanction be given to the acceptance by him of the tender of Messrs. Amroota Babaji & Co., the lowest of the three tenders received, for paving footpaths with blue stone in different parts of the city, at schedule rates, aggregating Rs. 15,250-11-4, *plus* Rs. 2,500, being 10 per cent. for establishment and contingencies. The cost to be met from the budget provision of Rs. 25,000 for paving footpaths."

No. 13228. *Resolved* : "That the following be *recorded* :—Letter No. 26405, dated 6th instant, from the Commissioner, reporting that he has entrusted the work of cleaning the open main drain running through the Flats to the stormwater reservoir, to Dagdu Rama at Rs. 1-6-0 per 100 cubic feet. The cost Rs. 2,384 being debited to savings in section II, A (2), establishment and labour, miscellaneous drainage."

No. 13229. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 26462, dated this day, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structure built without permission :—

Name of owner.	Where.
Mr. Maroti Shantaram Footali	...Building at No. 6, Peerkhan Lane."

No. 13230. *Resolved* : "That letter No. 26165, dated 2nd instant, from the Commissioner, be forwarded to the Corporation with the recommendation that sanction be given to the grant of Rs. 1,610 to the debit of unappropriated balance to be hereafter adjusted against

* *See* Appendix B.

surplus cash balance to meet the cost of railing and paling for Municipal ground at Foras Road, as shown in red on the tracing forwarded with the letter, with a view to prevent the fouling of the ground by passers-by."

Resolved: "That application, dated 6th instant, addressed to the Corporation by Mr. Abdool Latiff Mahomed, on the subject of license fees, be forwarded to the Commissioner for favour of report."

No. 13231.

BOMBAY, 14*th March* 1894.

AT the meeting of the Standing Committee held this day, there were present:

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*.
BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; HARKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; S. REBSCH, Esq., A.M.I.C.E.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L.M. & S. H. A ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meeting held on the 7th instant were signed.

The seal of the Corporation was affixed to deeds of contract (1) with Messrs. Garlick & Co., for the supply of 800 casks of Portland Cement; (2) with Mr. Dewram Keshaoji for enclosing with teakwood windows and Porebunder stone the verandah on the west side of the Municipal Offices; (3) with Messrs. Dewji Kanji & Co., for furnishing and fitting up a room for Councillors in the Municipal Office; (4) with Messrs. John Fleming & Co., for one six-ton steam road roller; (5) with Mr. Lakshman Balkrishna for fencing in a portion of ground round the Foras Road Market; (6) with Messrs. Walsh, Lovett & Co., for the supply of 50½" and 50¾" water meters; (7) to deeds of agreement with Mr. Bhojabhoy Allarkhia for the supply of grain and hay during 1894-95; (8) to deed of conveyance and assignment from the Corporation to Messrs. Kandas Brijvalabdas & Co., in respect of the sale of 61·12 square yards of Municipal land at Fergusson Road, as per resolution of the Corporation, No. 2403 of the 12th June 1893; (9) to deed of contract with Messrs. Garlick & Co., for paving with Indian Patent stone, two pieces of foot-paths in Kalbadevi Road; (10) ditto with Mr. Fazulbhoy Peerbhoy, for the supply of sand-stone, &c., during 1894-95; and (11) ditto with Mr. Sorabji Nowroji Moosa for the supply of road metal during 1894-95.

The seal was affixed to 2 attested duplicate debentures of the Sanitary Works Loan of 1885, Nos. 1297 N. N. and 1996 N. N., of Rs. 500 each.

No. 13519. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 27109, dated 13th instant, the Committee approve of the terms of the agreement for reference to arbitration in the matter of the assessment of the Tramway Company for the occupation of land by their tracks."

The seal of the Corporation was affixed to this deed of reference.

No. 13520. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 27191, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 13521. *Resolved*: "That, as applied for by the Commissioner in his letter No. 26867, dated 10th instant, sanction be given to the acceptance by him of the tender of Messrs. Mistri, Bhedwar, Vachaghandy & Co., the lowest of the 3 tenders received for works in connection with engine house, boiler house, coal-store, chimney, Engineers' and Firemen's quarters, &c., for the Colaba Sewerage District at schedule rates aggregating Rs. 82,239. The amount to be debited to the allotment for Colaba Sewerage Works."

No. 13522. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27083, dated 13th instant, sanction be given to the acceptance by him of the tender of Messrs. Nowroji Spencer & Co., the lower of the two tenders received, for paving and V-draining the van siding behind the Slaughter House at Bandora at schedule rates aggregating Rs. 7,092·680."

No. 13523. *Resolved*: "That, as applied for by the Commissioner, in his letter No. 26606, dated 8th instant, sanction be given to the acceptance by him of the tender of Mr. Dhunjibhoy Framji, the second lowest of the four tenders received, for flooring with galvanized corrugated iron sheets, the Bassein Creek bridges and culverts on the Tansa Duct between Tansa and Ghatkopar, at schedule rates aggregating Rs. 12,933-12-0."

Resolved : "That, as applied for by the Commissioner in his letter No. 26686, dated 9th instant, sanction be given to the transfer of Rs. 100 from savings in Conservancy Branch, 7, rent, rent of Government land at Colaba Road for stables and depôt for A Ward to same head, Municipal taxes on buildings in charge of Health Department, to meet excess on the latter head, due to insufficient budget provision."

No. 13524.

Resolved : "That, as applied for by the Commissioner, in his memorandum No. 26784, dated 10th instant, sanction be given to the transfer of Rs. 400 from savings in section I, C, maintenance of sluices, to section IV, B, maintenance of Love Grove Pumping Station, to meet excess on that section."

No. 13525.

Read letter No. 26505, dated 8th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to state that, while the Queen's Road and Girgaum sewerage works were in progress, the house belonging to one Ubai in Girgaum Road was connected with the 6" pipe drain running through the house gully of Mr. Hari Narayan on the score of economy. But as Mr. Hari, who has been corresponding with me since May 1893, insisted on the connection being severed, I consulted the Municipal Solicitors, who advise that the connection should be removed.

It has therefore been found necessary to connect the property referred to in the manner shown by yellow lines in the accompanying plan, the cost of which is estimated at Rs. 157.

The cost of this work is included in the sum of Rs. 14,000, which I recommended should be carried out along with certain other works out of savings pointed out in this office No. 17788, dated 29th November 1893, but as the preparation of plans and estimates for the several works referred to will take time, and as Mr. Hari requires the connection to be removed without delay, I request the Standing Committee to recommend the Corporation to sanction the expenditure of Rs. 157 out of savings, aggregating Rs. 2,26,914-3-6, on the allotment for the Queen's Road and Girgaum house sullage water connection works.—I have, &c., H. A. ACWORTH, Commissioner.

Resolved : "That letter No. 26505, dated 8th instant, from the Commissioner, be forwarded to the Corporation, with the recommendation that sanction be given to the expenditure of Rs. 157 to the debit of savings on the allotment for the Queen's Road and Girgam house sullage water connection works, to meet the cost of connecting the property of Bai Ubai with the Municipal sewer at Borebhat Lane."

No. 13526.

Considered the following letter No. 24219, dated 10th February 1894, from the Commissioner to the Secretary:—

SIR,—Referring to my letters Nos. 14461 of 29th September 1892, and 24543 of 11th February 1893, and Corporation resolutions Nos. 7936 of 27th October 1892 and 13121 of 6th March 1893, I have the honour to say that the total charges imposed on the Corporation, owing to the new offices not being completed within contract time, amount to Rs. 9,978-10-9, of which Rs. 2,855 are on account of rent and taxes of the old building and Rs. 7,123-10-9 on account of establishment charges. The former item has already been sanctioned, and the latter has been met partly from the provision for establishment and partly from savings on the contingencies for the works. The sanction of the Standing Committee is, however, required to vary the terms of the contracts with Messrs. Venku Baloo & Co. and Messrs. Richardson & Cruddas, so as to waive the penalty clauses and extend the contract period for completion up to 31st October 1893. The possibility of recovering all or any part of the above sums from the contractors has been very fully considered, and I append a letter from the Solicitors in which their legal liability is discussed. It comes to this, that except in regard of certain small items of work, which certainly cannot be relied on as having been by reason of the delay in their completion, any cause of inconvenience or expense, all the causes of delay are causes for which the contractors are not liable, either because the architect is prepared to recommend an extension under clause 14 of the general conditions, or because Messrs. Venkoo Baloo were delayed by Messrs. Richardson & Cruddas or Messrs. Richardson & Cruddas by Venkoo Baloo, the defaulters in either case being in law municipal servants, and the liability therefore a Municipal one.

This curious cross devolution of responsibility being pronounced by the Solicitors to be sound law, I have nothing to say against it, and the process of throwing good money after bad being an eminently unprofitable one, I would recommend that this letter be recorded.—I have, &c., H. A. ACWORTH, Commissioner.

BOMBAY, 1*st February* 1894.

To H. A. ACWORTH, ESQ.,

Municipal Commissioner.

SIR,—We have the honour to acknowledge the receipt of your No. 22886 of the 26th ultimo, forwarding us file of papers relating to the erection of Municipal buildings, together with the contracts given to Messrs. Venkoo Baloo and Messrs. Richardson & Cruddas, and asking for our advice as to the liability of both contractors owing to the works not being completed within the time specified in their respective contracts. In the case of Venkoo Baloo & Co., clause 13, schedule A, provides that the whole of the works shall be completed to the entire satisfaction of the Architect and

Engineer within three years from the date of the order to the contractors to commence the works, the date of the completion being the 18th of November 1892. In the case of Messrs. Richardson & Cruddas, clause 13 of schedule A provides that the whole of the works shall be completed to the entire satisfaction of the Architect and Engineer within one year from the date of the order, and we gather from the papers that the date was the 15th December 1891, and therefore the date of completion would be the 15th December 1892. In both cases it is quite clear that the works were not completed within the specified time, and the reasons for the non-completion are given in detail in Mr. Stevens' statement of the 15th December 1892.

The question, therefore, for consideration is whether or not those reasons are sufficient in law to relieve the contractors from the obligations entered into by them under their respective contracts. From the contracts it is clear that time was of the essence of the contract, and it is also clear that the non-completion within the specified time caused considerable expense, as well as very great inconvenience, to the Municipality, and though no doubt it may be perfectly true that the monsoon of 1892 was one of unusual severity and apparently was the chief cause of the delay in question, we do not think that that in itself would relieve the contractors from their obligations.

With regard to Messrs. Venkoo Baloo & Co., the reasons given by Mr. Stevens in statement A why they are not responsible may be divided into two heads as to items 1, 2, 3, 4, 5 and 10, because he considers an extension should be granted under clause 14 of the general conditions, and as to items 6, 7, 8 and 9, because Messrs. Richardson & Cruddas had not completed certain work necessary before Messrs. Venkoo Baloo & Co. could complete theirs.

With regard to the first reason, clause 14 of the General Conditions provides that:—"In the event of any cause arising which the "Architect and Engineer may consider a fair and reasonable ground "for granting an extension of the date of completion of the whole "works embraced in this contract, such extension must be approved "and endorsed on these presents in the handwriting of the Com-"missioner." No extension has been approved and endorsed, and if therefore we had only the first reason to deal with, we should advise that, in spite of Mr. Stevens' opinion, the contractors are at law bound by clause 13 of the General Conditions, and liable accordingly, though upon this point we doubt whether the Municipality would be successful if the contractors pleaded that it was by Mr. Stevens' orders that the work on the dome was proceeded with so slowly. We will now consider the second reason given by Mr. Stevens for the non-completion within the contract time of items 6, 7, 8 and 9 "owing to the non-completion of Messrs. Richardson & Cruddas' work of," &c. &c. So far as these items are concerned, we are of opinion that the reason given is a good one as between the

Municipality and Messrs. Venkoo Baloo; Messrs. Richardson & Cruddas are, so far as Messrs. Venkoo Baloo are concerned, the servants of the Municipality, and Messrs. Venkoo Baloo cannot therefore be held responsible for Messrs. Richardson & Cruddas' default. As, therefore, it was impossible for the contractors to complete the whole of the works as provided by clause 13, owing to the fault of the servants or agents of the Municipality, we are of opinion that a suit under the contract to recover the costs incurred by reason of the delay would not be successful against them. We next have to consider the reasons given by Mr. Stevens in statement B why Messrs. Richardson & Cruddas were unable to complete their work within the contract time. Items 1, 3, 8, 9, 11, 12, 13—Mr. Stevens is of opinion Messrs. Richardson & Cruddas are not responsible for, as the delay was caused by the backward state of Messrs. Venkoo Baloo's work, and as the same argument applies to Messrs. Venkoo Baloo as to Messrs. Richardson & Cruddas, namely, that as between Messrs. Richardson & Cruddas and the Municipality Messrs. Venkoo Baloo are the servants of the latter, it follows that they cannot be held liable under the contract for the costs incurred by the delay, as, according to Mr. Stevens, such delay, or at all events part of it, was occasioned by the servants or agents of the Municipality Messrs. Venkoo Baloo. In both cases there are items which were not completed within the contract time and which it is not alleged by either was owing to the default of the other, but it would be practically impossible to apportion to each item the amount of damage caused by its non-completion and the majority of these items, other than those that were not completed owing to Mr. Stevens' orders before referred to, were unimportant matters that of themselves would not have prevented the Municipality from occupying the building on the due date (see items 2, 4, 5, 6, 7, 10, 13 of statement B).

We are, for the above reasons, of opinion that Messrs. Venkoo Baloo are not liable for the expenses incurred and that Messrs. Richardson & Cruddas are only liable for such of the expenses as could be shown to have been incurred owing to the non-completion of items 2, 4, 5, 6, 7, 10 and 13 of Statement B. We return the papers.—We have, &c., CRAWFORD, BURDER & Co.

Resolved: "That, as applied for by the Commissioner in his letter No. 24219, dated 10th instant, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Venku Baloo & Co. for the construction of the Municipal Office, whereby the contract time for such work shall be extended to 31st October 1893.

No. 13527.

"That similar sanction be given to the variation of the contract with Messrs. Richardson and Cruddas for works

in connection with the same buildings whereby the contract time shall be extended to the same date.

"That these sanctions are passed subject to the decision of the Corporation as to whether, under the circumstances stated in the Commissioner's letter to the Secretary, No. 24219, dated 10th February 1894, and accompaniment thereto, any action should be taken against the contractors."

Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by G. W. Roughton, Esq.—

No. 13528. "That, as applied for by the Commissioner in his letter No. 26509, dated 7th instant, sanction be given to the purchase, for the Health Department, from Messrs. Khursedji & Sons, Kirkee, of 60 pairs of bullocks at Rs. 150 per pair and 40 pairs at Rs. 120 per pair. The cost, Rs. 13,800, to be debited to the budget grant for the same.

"That, under the terms of Section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as Messrs. Khursedji & Sons have for many years supplied this Municipality with bullocks.

"That, on the occasion of any future application for sanction to the purchase of bullocks, the Commissioner be asked to furnish the Committee with detailed statements showing the total number and length of service of the bullocks belonging to the Corporation and of the average yearly wastage from death or invaliding and the consequent number of bullocks which would ordinarily be required from time to time to meet such wastage."

Carried.

No. 13529. *Resolved* : "That letter No. 26955, dated 12th instant, from the Commissioner be forwarded to the Corporation, with the recommendation that sanction be given to the expenditure of Rs. 2,008 for cost of laying pipes to carry away storm-water from the Wodehouse Bridge to the sea, in order to prevent nuisance during the rains. The cost to be met from unappropriated surplus balance to be adjusted hereafter against surplus cash balance."

No. 13530. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26828, dated 10th instant, sanction be given to the employment of the following staff at a cost of Rs. 2,280 in lieu of that entered

in the budget for 1889-90 amounting to Rs. 3,240 for supervising the construction of the market at Colaba, *viz.*:—

1 Inspector at	Rs.	100	per mensem.
1 Maistry	„	40	„
1 Draftsman	„	25	„
1 Muccadum	„	15	„
1 Lascar	„	10	„
Rs. ...		190	
For 12 months...		12	
Rs. *et.*		2,280	

No. 13531. *Resolved*: "That, as applied for by the Commissioner in his letter No. 26543, dated 7th instant, sanction be given, under section 69 (E) of the Municipal Act, to the variation of the contract with Messrs. Walsh, Lovett & Co. for the supply of pipes, fittings, &c., for the Water Works Department, whereby the contract time may be extended from 6th November to 31st December 1893."

No. 13532. *Resolved*: "That, as applied for by the Commissioner in his letter No. 26923, dated 12th instant, sanction be given to the variation of the contract with Mr. Shankerao Baba Mandrupkar for supplying street name plates, whereby the contract time may be extended from 28th February 1894 to the 20th instant."

No. 13533. *Resolved*: "That, as applied for by the Commissioner in his letter No. 26610, dated 8th instant, sanction be given to the variation of the contract with Mr. Dossabhoy Barjoji Padra for making and pitching the slopes of a portion of Haines Road, whereby the contract period may be extended from 13th July 1893 to 12th September 1893."

Considered the following:—

No. 24472 OF 1893-94.

BOMBAY, 14*th February* 1894.

TO THE MUNICIPAL SECRETARY.

SIR,—I have the honour to forward a letter, No. 554, of 29th December last, from Mr. Stevens with account for Rs. 4,843-6-0, being the balance of fees claimed due by him. It is made up of two items:—

I. Balances of commision on the sanction of Rs. 9,86,009 for the construction of the buildings ... ... Rs. 3,467-9-6

II. Balance of commission on the sanction of Rs. 3,03,884-8-0 for the construction of fire service, water-supply, &c. ... ... „ 1,375-12-6.

The only question with regard to item I is as to the inclusion or otherwise of Rs. 627-13-4 on account of commission on Rs. 9,659 sanctioned by the Corporation under their resolution No. 5540 of 19th December 1889 as a supplementary grant towards the building. The necessary allotment for commission on this item was made as will be seen from my letter No. 17828 of 18th November 1890 (*vide* Proceedings of Standing Committee for 1890-91, page 473). The Chief Accountant's report (which I append) shows the terms on which the commission was to be granted, and I do not think the present claim can be contested. 2.—With regard to item II, the Chief Accountant's report gives full details. The items which require special sanction are Nos. 2, 4, 6, 7 and 8 enumerated by the Chief Accountant and totalling Rs. 501-6-8. The claims seem to me to be all fair ones. 3.—Sanction of the Standing Committee is required to the payment referred to in my 1st para., and of the Standing Committee and Corporation to that referred to in my 2nd para.—I have, &c., H. A. ACWORTH, Commissioner.

No. 554.

BOMBAY, 29*th December* 1893.

To THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to forward herewith my account for the balance of my fees in connection with the Municipal Building, fire service, water-supply, drainage lift and furniture, &c., and shall feel obliged by your arranging for the payment of the same at an early date, the whole of the work having now been completed.—I have, &c.,

FREDERICK W. STEVENS,
Architect, Civil Engineer and Surveyor.

The Bombay Municipality .....*Dr.*

To F. W. STEVENS,
Architect, Civil Engineer and Surveyor.

	Rs.	a.	p.
To Balance of commission due to Mr. Stevens against the sanction of Rs. 9,86,009 for the construction of the buildings	3,467	9	0
Balance of commission due to Mr. Stevens against the sanction of Rs. 3,03,884-8-0 for the construction of fire service, water-supply, drainage lift, furniture, &c., including increased size of fire service fittings ...	1,375	12	6
	Rs. 4,843	6	0

MEMORANDUM No. 4080 OF 1893-94.

BOMBAY, *6th February* 1894.

TO THE COMMISSIONER.

	Rs.	a.	p.
The work in connection with the construction of the Municipal Offices is divided into two main heads, *viz.*, (1) the building, (2) the supplementary work such as fire and water services, drainage, furniture, electric lighting, &c.; as regards (1) the Building, Mr. Stevens' original estimate was ...	9,76,350	0	0
Supplementary estimate	9,659	0	0
Total Rs.	9,86,009	0	0
The actual cost has been	9,36,561	7	7
Saving Rs.	49,447	8	5

Mr. Stevens claims 6½ per cent. commission on the total of the estimate, Rs. 9,86,009. When the work was entrusted to Mr. Stevens, the Corporation, under resolution No. 238, dated 29th April 1889 (page 21 of the Record of Proceedings of the Corporation for 1889-90), sanctioned the remuneration at the rate of 6½ per cent. on the works executed in full of all his fees whatever, including his claim for bills of quantities and detailed estimates including his fees for measurements and making out extras and omissions and that the same be paid in the following way, *viz.*, 1¾ per cent., now 1½ per cent., on delivery of detailed quantities and estimates and the balance of 3¼ per cent. on the instalments paid to the contractor from time to time. Correspondence took place between the Commissioner, the Municipal Solicitors and Mr. Stevens as to whether the 6½ per cent. was to be calculated on the approximate estimate or on the actual cost of the work as it might turn out, and the Commissioner, under his No. 5285, dated 20th June 1889, wrote to Mr. Stevens as follows:—

"I have the honour to inform you, in continuation of previous correspondence, that the following are the terms as finally sanctioned by the Corporation in respect of the remuneration paid and to be paid to you for your services in connection with the new Municipal Buildings as now designed, *viz.*: (1) that your remuneration be fixed at the rate of 6½ per cent. on Rs. 9,76,350, being the amount of the approximate estimate; (2) that the said percentage is to be in full of all charges for professional services of every description in respect of the designs, making approximate and detailed estimates, preparing specifications and bills of quantities, making all necessary plans and drawings, elevations, and sections, preparing all necessary details and instructions for execution of the works, procuring and examining tenders for the work (if required), personal supervision and general superintendence of works, examin-

ing and passing the accounts, measuring the works and certifying accounts for extras and omissions (not involving substantial alteration of design), &c.; (3) provided, however, that the aggregate amount of payments to be made to you shall in no case exceed on the whole 6½ per cent. upon the approximate estimate."

These terms Mr. Stevens accepted under his No. 79 of 21st June 1889, and the Standing Committee, under resolution No. 1631 of 26th June 1889, approved of them (page 108 of the Record of Proceedings of the Standing Committee for 1889-90). The supplementary grant of Rs. 9,659 was sanctioned by the Corporation under their Resolution No. 5540 of 19th December 1889 (page 196 of the Record of Proceedings of the Corporation for 1889-90), and a sum representing 6½ per cent. on this grant was allotted for commission (*vide* page 473 of the Proceedings of the Standing Committee for 1890-91).

It is not quite clear whether Mr. Stevens should get this commission or whether the work should be considered an extra for which commission should not be allowed. I, of course, presume that Mr. Stevens is entitled to the 6½ per cent. commission on his original estimate of Rs. 9,76,350 as this was approved by the Standing Committee.

The following is the summary of the estimates, actuals, and commission :—

	Original.	Supplementary.	Total.
Estimates ....Rs.	9,76,350-0-0	+ 9,659-0-0	= 9,86,009-0-0
Commn. at 6½ per cent. „	63,462-12-0	+ 627-13-4	= 64,090-9-4

Work actually completed	Rs.	9,36,561	7	7
Commission at 6½ per cent.	„	60,876	7	11
Difference	Rs.	49,447	8	5
Commission at 6½ per cent.	„	3,214	1	5
Amount of commission already paid to Mr. Stevens	„	60,622	15	10
Amount due if commission on Rs. 9,659 is to be reckoned	„	3,467	9	6
Amount due if commission on Rs. 9,659 is not to be reckoned	„	2,839	12	2

If it is decided to allow the 6½ per cent. commission on Rs. 9,659, formal sanction of the Standing Committee is necessary to extend the terms of the agreement with Mr. Stevens to such payment.

2. The supplementary works, fire service, water-supply, gas lighting, &c.

Mr. Stevens' original estimate was ...Rs.			3,28,481	12 0
The item of gas lighting was eliminated at „			28,637	2 0
		Rs.	2,99,844	10 0
Supplementary estimate for increased cost of fire service, fittings and fire pumps ... Rs.	5,509	14 0		
The item of fire pumps was eliminated at „	1,470	0 0		
		„	4,039	14 0
Total of final estimate ... Rs.			3,03,884	8 0
Actual cost ... ... „			2,80,365	15 11
Saving... Rs.			23,518	8 1

The terms under which Mr. Stevens was engaged to carry out these works are embodied in resolution of the Corporation No. 6523 of 30th January 1890 (page 265 of the Record of Proceedings of the Corporation for 1889-90) and are as follows :—

"That, as recommended by the Standing Committee, the Corporation approve of the employment of Mr. F. W. Stevens, C.I.E., to frame an estimate of the cost of—

(1) Fire service with fittings,
(2) Water supply do.
(3) General drainage do.
(4) Surface drainage,
(5) Hydraulic lift with supply tank,
(6) Lighting,
(7) Compound railings and gates and laying out ground, and
(8) Furniture for the new Municipal Office Buildings on the following terms for preparing the requisite designs, drawings (plans elevation sections) :—

General description, &c.	1¾ per cent.	
Preparing detailed quantities and estimate	1½ „	
Specification, duplicate working, and detailed drawings and instructions for execution	2	3¼ per cent.
General supervision and superintendence of work (exclusive of clerk of works) examining and passing accounts ...	1¼	

The Corporation, in their resolution No. 8955 of 8th December 1890 (page 289 of the Record of the Proceedings of the Corporation for 1890-91), sanctioned payment of commission to Mr. Stevens as follows:—

"That, as recommended by the Standing Committee in their resolution No. 8704, dated 26th ultimo, sanction be given (1) to the payment of Rs. 4,927-3-7 to Mr. Stevens, C.I.E., being the amount of fees due to him for work already done in preparing the estimates of additional works in connection with the New Munici-

pal Office Building, amounting to Rs. 3,28,481-12-0, to the debit of surplus cash balance; (2) to the employment of Mr. Stevens for the purposes mentioned by the Commissioner in his letter in the carrying out of the additional works on the understanding that Mr. Stevens' commission thereon will amount to Rs. 14,992-3-8, that being 5 per cent. on the estimated cost of the additional works amounting to Rs. 2,99,844-10-0 as sanctioned by the Corporation in their resolution No. 8210, dated 14th November 1890, and No. 6523, dated 30th January last." On the 3rd December 1891, the Corporation, in their resolution No. 9672 (page 414 of the Record of Proceedings of the Corporation of 1891-92), accorded sanction to the payment of Rs. 4,039-14-0 to meet the cost of supplying 2½" fire service fittings instead of the 2" fitting entered in the contract. In this sanction no amount was included for 5 per cent. commission. The estimate had included an item of Rs. 1,470 for fire pumps, but this item was eliminated. Mr. Stevens' claim for commission is as follows:—

		Rs.	a.	p.
1.	1½ per cent. on Rs. 3,28,481-12-0 for preparing detailed quantities and estimates ...	4,927	3	7
2.	1½ per cent. on Rs. 5,509-14-0 for do. for fire service fittings	82	10	4*
3.	1¾ per cent on Rs. 2,99,844-10-0, amount of final estimate for preparing preliminary sketches, &c.	5,247	4	6
4.	1¾ per cent. on Rs. 4,039-14-0, supplementary estimate	70	11	2*
5.	3¼ per cent. on Rs. 2,99,844-10-0 for supervision on amount of final estimate ...	9,744	15	2
6.	3¼ per cent. on Rs. 4,039-14-0 do. supplementary estimate	131	4	8*
	Additional Items.			
7.	1½ per cent. on an estimate of Rs. 11,516-11-0 for cost of additions and alterations in connection with the furniture... ...	172	12	0*
8.	1½ per cent. on an estimate of Rs. 2,935-5-0 for cost of additions and alterations to electric light fittings	44	0	6*

The commission on items Nos. 1, 2, 3, 4, 7, and 8 has been paid; on items Nos. 5 and 6 the commission has been paid up to the actual cost of the work. Mr. Stevens claims that, in addition to commission on all amounts of estimates for supplementary and additional works, he should be paid the commission on the amount of the final estimate of Rs. 2,99,844-10-0 + Rs. 4,039-14-0, although the actual cost of the whole of the works has been only Rs. 2,80,365-15-11. If it is decided that commission be paid as

* These items are not provided for in the amounts sanctioned by the Corporation, but have been paid for provisionally.

claimed by Mr. Stevens, sanction of the Standing Committee and the Corporation will be required for the payment on items Nos. 2, 4, 6, 7 and 8 amounting to Rs. 501-6-8. This amount can be met by a transfer from savings on the allotment for professional or law charges in connection with the buildings and supplementary works.

Under the terms of the agreement an amount of Rs. 2,500 is to be retained out of Mr. Stevens' commission until the passing of the final bill of the works. The final bills are now in this office under audit.

W. PEARSON, Acting Chief Accountant.

No. 13534. *Resolved* (with one dissentient): "That, as applied for by the Commissioner in his letter No. 24472, dated 14th ultimo, sanction be given, under section 69 (*e*) of the Municipal Act, to the variation of the agreement with Mr. F. W. Stevens, architect of the new Municipal office, whereby a commission of Rs. 627-13-4 shall be paid to him on the Rs. 9,659 for certain supplementary works for the building sanctioned by the Corporation under their resolution No. 5540, dated 19th December 1889. (2) That the Corporation be recommended to sanction the payment to Mr. F. W. Stevens, Architect of the Municipal Office, of commission on certain supplementary works and supplies for the office, amounting to Rs. 501-6-8 shown in items 2, 4, 6, 7 and 8* of the Acting Chief Accountant's memorandum to the Commissioner, No. 4080, dated 6th February 1894. The charge to be debited to savings on the allotment for professional or law charges in connection with the construction of the building and the supplementary works.

No. 13535. *Resolved*: "That, with reference to the resolution of the Corporation No. 13421, dated 8th instant, and in supersession of the Committee's Resolution No. 12520, dated 21st ultimo, sanction be given to the excess of Rs. 2,225-14-0 on the contract rates for the supply of engines and fittings and the carrying out of certain other works in the Municipal Office by Messrs. Richardson and Cruddas being met from the provision for contingencies on account of the works in question."

		Rs.	a.	p.
* (2)	1½ per cent. on Rs. 5,509-14-0 for preparing quantities and estimates for fire service fittings	82	10	4
(4)	1¾ per cent. on Rs. 4,039-14-0 for preparing quantities and estimates	70	11	2
(6)	3¼ per cent. on Rs. 4,039-14-0 for preparing quantities on supplementary estimates	131	4	8
(7)	1½ per cent. on an estimate of Rs. 11,516-11-0 for cost of additions and alterations in connection with the furniture	172	12	0
(8)	1½ per cent. on an estimate of Rs. 2,935-5-0 for cost of additions and alterations to electric light fittings	44	0	6
	Total ...	501	6	8

Resolved: "That, with reference to Corporation's Resolution No. 13424, dated 8th instant, the Standing Committee beg to state that the following is the detailed transfer statement received from the Commissioner:—

No. 13536.

TRANSFER FROM					TRANSFER TO					
Department.	Heads and Sub-Heads.	Budgetted amount.	Amount expended including liabilities to be paid.	Savings to date.	Total Savings.	Reasons of Savings.	Department.	Heads and Sub-Heads.	Budgetted amount for 1893-94, *plus* additional Grant.	Amount expended and to be expended.	Excess over budgetted amount.	Total excess over budgetted amount.	Reasons of excess expenditure.
(A) Municipal Engineer's Department.							Miscellaneous.	Pensions, Gratuities and Compassionate Allowances.	Rs. 53,999-9-0.	Rs. 41,699-9-0.	Rs. 5,700.	Rs. 5,700.	Excess due to the additional number of employés who retired on pension during 1893-94 and to claims for compassionate allowances payable to the families of the employés who died in the Municipal Service.
(B) Education.													
(C) Municipal Debt.													
(A) General Supervision and Miscellaneous Duties—													
(1) Salary of the Executive Engineer.													
(II) Surveyors and Draftsmen.													
(B) Joint School Committee Establishment.													
(C) Charges on account of loans, commission to Bank of Bombay for payment of interest.													
(A) I ... Rs. 15,836 10 8													
III ... " 7,446 12 10													
(B) ... " 6,500 0 0		Rs. 40,283- 7-6											
(C) ... " 12,000 0 0													
(A) I ... Rs. 13,760 0 0													
III ... " 4,816 6 8													
(B) ... " 4,394 4 4			Rs. 34,336-14-1										
(C) ... " 11,327 8 1													
(A) I ... Rs. 1,586 10 8													
III ... " 2,631 6 2													
(B) ... " 1,105 11 8				Rs. 5,926- 9-6									
(C) ... " 602 12 11													
					Rs. 5,926- 9-6	(A) I. Saving due to the Executive Engineer drawing a lower salary than that provided in the Budget.							
						(A) III. Savings principally due to the appointment of Chief Surveyor not having been filled up during the transfer of the permanent incumbent.							
						(B) Saving almost due to the provision for house-rent not being required.							
						(C) Saving due to the commission payable to the Bank of Bombay for payment of interest being less than that estimated for.							

No. 23930 OF 1893-94.

7th February 1894.

Submitted to the Standing Committee for favour of sanction to the transfer.

H. A. ACWORTH, Commissioner.

Considered the following :—Extract from resolution of the Corporation No. 13422, dated 8th instant, as under :—

" That the Standing Committee be requested in future to give details of the savings from which it is proposed to meet the cost of additional grants."

Proposed by G. W. Roughton, Esq., seconded by A. G. Viegas, Esq.—

No. 13537. " That, with reference to the Corporation's resolution No. 13422, dated 8th instant, the Secretary be requested to furnish an estimate of the probable cost that would be involved by printing in all cases of tranfers the full details submitted by the Commissioner to the Committee."

Carried.

Resolved: " That the following be laid on the table :—

No. 13538. Letter, dated 8th instant, from Messrs. Ardasir Framji Moos and Nanabhai R. Ranina, stating that they have audited the weekly statements of receipts and disbursements at the end of each week for the month of February last and compared them with the general and subsidiary ledgers and journals, and found them correct. Forwarding the usual summary and statement of their scrutiny of accounts."

Resolved: " That in reply to his letter, dated 6th Novem-

No. 13539. ber last, Mr. Noor Mahomed Jarajbhoy Peerbhoy be informed that there is no milch-cattle stable on the west of his building at Foras Road.

" That Mr. Kasam Jamal, the owner of the low-lying ground, will be called upon to fill in the same and that, in order to prevent the nuisance that is committed on the Municipal portion of the land, the Corporation have been asked to sanction the cost of fencing in the space."

Resolved : " That the following be *recorded*:—Memo-

No. 13540. randum No. 26689, dated 9th instant, from the Commissioner forwarding analyses of water as under :—

Sample of unfiltered water of Tulsi Lake taken from the settling basin of Malabar Hill Reservoir on the 26th February 1894.

	Parts per million.
Free Ammonia	·04
Albuminoid Ammonia	·15

Sample of partly filtered water of Tulsi Lake taken from the distributing basin of Malabar Hill Reservoir, on the 26th February 1894.

	Parts per million.
Free Ammonia	·015
Albuminoid Ammonia	·09

Sample of unfiltered Vehar water obtained from the settling basin of the Bhandarwada Reservoir on the 27th February 1894.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·14

Sample of filtered Vehar water obtained from filter channel of the Bhandarwada Reservoir on the 27th February 1894.

	Parts per million.
Free Ammonia	·01
Albuminoid Ammonia	·06

Sample of filtered Vehar water obtained from Vehar Filters.

	Parts per million.
Free Ammonia	·03
Albuminoid Ammonia	·06

Sample of unfiltered Tansa water drawn from a hydrant on 27″ main in Arthur Road on the 26th February 1894.

	Parts per million.
Free Ammonia	·005
Albuminoid Ammonia	·10

The following return was read and *recorded* :—

No. 13541. Return of fires at Lower Colaba (Bombay Cotton Press), Thanna Street (Wari Bunder), No. 219, Kalbadevi Road, Purbhadevi Road (Warli), and Lower Colaba (Bombay Cotton Press), forwarded with the Commissioner's memorandum No. 26926, dated 12th March 1894.*

No. 13542. *Resolved* : "That, as applied for by the Commissioner in his letter No. 26956, dated 12th instant, the Corporation be recommended to accept the following offers in respect of disused machinery, &c., at Love Grove and Carnac Bunder Pumping Stations :—(1) Love Grove Pumping Station—the offer of Rs. 20,000 for the sale of the old boilers and engines, Rs. 850 for the 18″ centrifugal pump, and Rs. 150 for portions of masonry ; and (2) Carnac Bunder Depôt—of Rs. 2,500 for the disused engines at the Carnac Bunder depôt."

On the application of the Commissioner, it was agreed that the Chairman be asked to propose at the meeting of the Corporation to be held on the 13th instant that this resolution be considered as urgent business.

The following statement † was laid on the table:—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 11th March 1894.

* *See* Appendix C. † *See* Appendix B.

BOMBAY, 20*th March* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman*, BHALCHANDRA KRISHNA BHATWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSHRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; S. REBSCH, Esq., A.M.I.C.E.; ACCACIO G. VIEGAS, Esq., L.M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; the HEALTH OFFICER; and the SECRETARY.

The signing of the minutes of the meeting, held on the 14th instant, was postponed.

No. 13953. *Resolved*: "That the following be *recorded*:—

No. 982 OF 1894.

GENERAL DEPARTMENT.

BOMBAY CASTLE, 15*th March* 1893.

Resolution of Government.—His Excellency the Governor in Council is pleased to appoint Mr. R. H. Vincent, C.I.E., to be a member of the Standing Committee of the Municipal Corporation, Bombay, *vice* the Hon'ble Mr. R. G. Oxenhan, M.A., and to re-appoint the Hon'ble Mr. Fazulbhoy Visram to be a member of the same Committee.

W. L. HARVEY,
Under Secretary to Government.

The seal of the Corporation was affixed to the following:—(1) to deed of agreement between Mr. Mahomedbhoy Rowjee and the Corporation, securing to the Municipality the right to acquire at any future time the set-back of property situated at No. 266, Samuel Street, without payment of any compensation in respect of the unauthorized work indicated on the plan annexed to the deed, and at the rate of Rs. 52-8-0 per square yard for any land shown on the plan, to be there taken up, and for any loss, damage or expense sustained by him by reason of such acquisition; (2) ditto with Mr. Rahim Ibrahim Jamalani for the supply of wood for cremation purposes during 1894-95; (3) to deed of contract with Messrs. Ruttonji Bezonji & Co. for the construction of a market at Colaba; (4) ditto with Messrs. Sullemanji Mulla Abdul Ali & Co. for the supply of petty stores; (5) ditto with ditto, for the supply of hardware; (6) ditto with ditto for the supply of timber, during 1894-95; (7) ditto with Messrs. Dagdu Rama, Yessoo Malhari and Jairam Gangaram for the work of removing silt from and cleaning the old main drain from the Municipal pipe

depôt at Bellasis Bridge Road to the Love Grove sluice gates; (8) to lease for occupancy of stable owned by Poshety bin Poshaya Lingal, situate at Kamathipura.

The seal was also affixed to 15 attested duplicate debentures of Tansa water works loan, Nos. 42 to 50, 67, 390, 500, 575, 629 and 843, for Rs. 500 each; 4 ditto Nos. 881-82, 991-92, 9683-84 and 13091-92 for Rs. 1,000 each; 4 ditto Nos. 15471 to 15474, for Rs. 500 each; 1 consolidated debenture of the Tansa water works loan, Nos. 458 and 459, of Rs. 1,000; 4 ditto Nos. 12797-800, 13021-24, 13025-28 and 20329-32, for Rs. 2,000 each.

No. 13962. *Resolved*: "That, as applied for by the Commissioner in his memoranda Nos. 27419 to 27426, dated 16th instant, and Nos. 27471 and 27472, dated 17th idem, sanction be given, under section 351 (2) of the Municipal Act, to the removal of the following structures built without permission:—

Names of Owners.	Where.
Mr. Shahaboodin Kazi...	Building at DeLisle Road.
„ Macoondrao Vithal	„ „ Girgam Back Road.
„ M. E. Shaik	„ „ Lady JamsetjeeRoad.
„ Hajloobhai Shaik Hoosein ...	„ „ Victoria Bunder.
„ Pandarinath Madanji	„ „ LadyJamsetjee Road.
Hadji Kasam Mitha	„ „ Fergusson Road.
Mr. Manockji Edalji Contractor ...	„ „ Tardeo Road.
Chendre Naikeen	„ „ Kennedy Bridge.
Mr. Bhicu Bala, servant of Mr. Estwantrao Shivaji Mariatta	„ „ Khetwadi Back Road.
„ Gavrishankar Bhaya of Mr. Damodhardas Kaliandas	„ „ Sleater Road."

No. 13963. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 27782, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 13964. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27185, dated 14th instant, sanction be given to the acceptance, by him, of the tender of Messrs. Mistri, Bhedwar, Wachaghandy & Co., the lower of two tenders received, for the supply of earth to cover cutchra deposits at the following rates: on the Flats, Rs. 2-10-0 per brass; outside Flats, Rs. 2-11-0 per brass."

Resolved : " That, as applied for by the Commissioner in his letter No. 27500, dated 17th instant, sanction be given to the acceptance, by him, of the tender of Messrs. John Fleming & Co., the lowest of the three tenders received, for the supply of 700 casks of Portland cement at the rate of Rs. 8 per cask of 400 lbs. gross or 380 lbs. net."

No. 13965.

Resolved : " That, with reference to the Commissioner's letter No. 27558, dated 17th instant, and the Committee's resolution No. 13217, dated 7th idem, sanction be now given, under section 69 (*e*) of the Municipal Act, to the variation of the contract with Messrs. Walsh, Lovett & Co., for the supply of sweeping machines and scraping machines, whereby the number of sweeping machines will be increased from five to eight, and the period of supply extended from two to three months."

No. 13966.

Resolved : " That, as recommended by the Commissioner in his letter No. 27516, dated 17th instant, sanction be given to the payment of Rs. 50 per mensem, as conveyance allowance, to Mr. P. P. Câma, who has been appointed to act for the Chief Inspector of Roads during the latter's absence on privilege leave for three months. The cost to be debited to savings on the conveyance allowance of the Chief Inspector."

No. 13967.

It was agreed that the consideration of the following be postponed till the next meeting and that meanwhile the Commissioner be requested to submit a complete list of the materials in question which have been already purchased and of those to be purchased : —Memorandum No. 27572, dated 19th instant, from the Commissioner, requesting sanction to the transfer of Rs. 6,000 from savings in III, Water Works, section I, establishment and labour, to section II, materials, to meet excess on the latter head due to insufficient budget provision.

No. 13968.

Resolved : " That, as applied for by the Commissioner in his letter No. 27186, dated 14th instant, sanction be given to the acceptance, by him, of the tender of Messrs. Littlewood, Palonji & Co., the lowest of the 5 tenders received, for laying cast-iron pipes in Bapty Road and other places at rates, aggregating Rs. 9,204-11-9 *plus* Rs. 920, being 10 per cent. contingencies: total Rs. 10,124-11-9. The cost to be debited to the allotment of Rs. 30,000, for laying water mains in the city."

No. 13969.

No. 13970. *Resolved* : " That, as applied for by the Commissioner in his memorandum No. 27418, dated 16th instant, sanction be given to the transfer of Rs. 80, from savings in the grant for B, public lighting, section 2, gas lighting, A, streets and bandars, to general office establishment, I, winding up and keeping in order Municipal clocks, to meet excess on the latter head."

Considered letter No. 27337, dated 15th instant, from the Commissioner to the Secretary, as under :—

SIR,—I have the honour to state that the Health Officer reports that the ground between the railway and the chawls immediately to the north of Mori Road, Mahim level-crossing, is a foul hole, which should be filled up with earth. This ground belongs to three parties, *viz.*, the Railway Company, Mr. Gungadas Sunderji and the Municipal Corporation, and, with a view to enable him to take action against the other two owners, he recommends that the Municipal portion should be filled in first, a recommendation in which I concur. The Engineer estimates the cost of filling at Rs. 911, which I request the Standing Committee to recommend the Corporation to sanction out of unappropriated balances to be adjusted hereafter against surplus cash balance when the accounts for the year 1893-94 are closed.—I have, &c., H. A. ACWORTH, Commissioner.

No. 13971. *Resolved* : " That, as applied for by the Commissioner in his letter No. 27337, dated 15th instant, the Corporation be recommended to sanction the expenditure of Rs. 911 out of unappropriated balance to be adjusted hereafter against surplus cash balance, to meet the cost of filling in the Municipal ground, situate between the Railway and the chawls to the north of Mori Road, Mahim level-crossing, which ground the Health Officer reports is a foul hole.

" That the Standing Committee have satisfied themselves that there are balances available to the credit of surplus cash balance."

No. 13972. *Resolved :* " That the following be *recorded* :—Letter No. 27097, dated 13th instant, from the Commissioner, reporting that he has sanctioned the purchase of 50 tons of Sanctoria coal, from Messrs. Brooks & Co., at Rs. 15-4-0 per ton, delivered at the Municipal Workshops. Stating that the coal is required for the steam rollers and the cost, Rs. 762-8-0, will be debited to the grant for road repairs and maintenance."

No. 13973. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27198, dated 14th instant, and under the pension regulations, sanction be given to the payment of a monthly pension of Rs. 4 from 10th idem to Lalya Gunga, fireman, Fire Brigade, who is incapacitated for further work, in consequence of a fracture of the right thigh-bone, which injury he received while in the execution of his duty."

No. 13974. *Resolved*: "That the following be *recorded* :—Letter No. 27187, dated 14th instant, from the Commisioner, reporting the sale of the following rights of collecting fruits in the Victoria Gardens :—

Nature of crop.	Name of the highest bidder.	Amount of bid.	Amount realised last year.	REMARKS.
		Rs.	Rs.	
Mango crop from 1st April 1894 to 31st March 1895.	Dhakoo Dewji ...	175	85	
Cocoanut crop from 1st April 1894 to 31st March 1895.	Ebrahim Rahim ...	26	13	
Chickoo and Backooli from 1st April 1894 to 30th September 1895. * Star apples from 1st April 1894 to 31st March 1895.	Jivaji Kushaji Pansray.	175	50	*Star apples were not sold last year."

Considered the following :—

No. 927.

GENERAL DEPARTMENT.

BOMBAY CASTLE, 13*th March* 1894.

Letter from the Municipal Commissioner for the City of Bombay, No. 17724, dated 28th November 1893 :—

"With reference to Government Resolution No. 4025 of 10th instant, General Department, I have the honor to say that the Standing Committee have sanctioned the arrangement proposed by me and agreed to in the above resolution. I have now to ask in what manner Government desire that the amount should be paid. I would suggest that it be paid with the general tax twice a year. As far as the current year is concerned, possibly Government may require some little time to make arrangements with occupants ; and I would suggest that the new procedure should come into force from 1st January next, which will result in only three months tax being this year payable by Government."

Letter from the Municipal Commissioner for the City of Bombay, No. 22044, dated 17th January 1894.

Memorandum from the Public Works Department of the Secretariat, No. A-2055, dated 29th December 1893. Expressing

the opinion that the water tax should be paid monthly by deductions from salary bills with the rent, as there might be inconveniences due to officers vacating bungalows, if the payments were only made half-yearly.

Memorandum from the Military Department of the Secretariat, No. 50-C.M.A., dated 3rd February 1894. Retransferring the papers with the notes and minute recorded in that department, together with the reports from the Quartermaster-General and the Controller of Military Accounts, who state that the water tax in question should be recovered monthly by the Executive Engineer in the rent bills; and make remarks.

Memorandum from the Military Department of the Secretariat, No. 97-S., dated 3rd February 1894.

RESOLUTION.—The recovery of the water tax monthly by deduction from salary bills is sanctioned, the payment to the Municipality being made twice a year as suggested by the Municipal Commissioner. The arrangement should be brought into force as soon as possible after the issue of orders.

2. The Municipal Commissioner should be requested to submit the question regarding the continuance of the arrangement for the consideration of the Standing Committee and report the result to Government.—W. L. HARVEY, Under Secretary to Government.

No. 27392 OF 1894.

BOMBAY, 16*th March* 1894.

Copy forwarded to the Standing Committee for favour of sanction to the continuance of the arrangement sanctioned in their resolution No. 8148 of 22nd November last.—H. A. ACWORTH, Commissioner.

No. 13975. *Resolved* : " That, as applied for by the Commissioner in his memorandum No. 27392, dated 16th instant, sanction be given to the continuance of the arrangement sanctioned in the Committee's Resolution No. 8148, dated 22nd November last, for the recovery of compounded water rate, in the case of Government bungalows occupied by officers in their official capacity, equal to the tax on value as per Mr. Stevens' valuation."

No. 13976. *Resolved* : " That, as applied for by the Commissioner, in his letter No. 27188, dated 14th instant, sanction be given, under section 305 of the Municipal Act, to written notices being issued on the owners of the several premises fronting, or adjoining, or abutting on Moogbhat Cross Lane, requiring them to metal, level and drain the same in such manner as the Commissioner shall direct."

No. 13977. *Resolved* : "That, as applied for by the Commissioner in his letter No. 24529, dated 14th February last, and with reference to the resolution of the Corporation, No. 13592, dated 15th instant, sanction be now given to the filing of a suit in the High Court against the G.I. P. Railway Company, and application for an injunction restraining the Company from preventing Municipal servants from entering on the Company's land at Chinchpokli level-crossing for the purpose of making a connection between the Municipal water mains thereat."

No. 13978. *Resolved* : "That the following be brought on at a future meeting :—Letter No. 27189, dated 14th instant, from the Commissioner, on the subject of excess consumption of water for Municipal purposes."

No. 33979. *Resolved* : "That the following be circulated and brought on at a future meeting :—Letter No. 27130, dated 13th instant, from the Commissioner, on the subject of the raising of the loan of Rs. 25¼ Lakhs."

No. 13980. *Resolved* : "That the following memorandum No. 26952, dated 12th instant, from the Commissioner be forwarded to the Corporation, with reference to petition, dated 15th January last, from Mr. Bechurdas Morlidhar, on the subject of the improvement of Agripada :—

No. 16930 OF 1893-94.

BOMBAY, 9*th March* 1894.

TO THE MUNICIPAL COMMISSIONER.

Large plots of land have been acquired in the Agripada District and four new roads are now being constructed on the ground between Ripon Road and the B. B. & C. I. Railway ; in all an outlay of about Rs. 20,00,000 has already been incurred ; negotiations for the purpose of more land fronting the proposed roads are in progress. After the completion of the four roads now under consruction, some land fronting them will be sold, and it is intended to acquire more land and to construct new roads afterwards from the sale-proceeds. The new roads now under construction will be completed within a year ; storm-water drains are being constructed under these roads, to which the sullage from the existing houses will be admitted as far as possible, and when this is done, there will be no cause of complaint from the residents of that part of Agripada which lies to the west of Ripon Road.—M. C. MURZBAN, Executive Engineer.

No. 26952 of 12th March 1894.

Copy forwarded to the Municipal Secretary, with reference to the Standing Committee's Resolution, No. 10595, of the 17th January last. The Corporation are aware how difficult and expensive a work it has been to acquire the necessary land in Agripada. It might have been got much sooner no doubt, but at twice the expense. Nothing can be more false than that there has been any negligence or the smallest avoidable delay.—H. A. ACWORTH, Commissioner.

No. 13981. *Resolved* : " That the following be *recorded* :—Memorandum No. 27473, dated the 17th instant, from the Commissioner, reporting that no house or portions of a house fell during February 1894."

No. 13982. *Resolved* : " That the following memorandum, No. 27345, dated 15th instant, from the Commissioner and accompaniment thereto be forwarded to the Corporation with reference to petition, dated 6th idem, from Mr. Abdul Latiff Mahomed on the subject of License Fees :—

No. 9029 of 1893-94.

Bombay, 13*th March* 1894.

To The COMMISSIONER.

The applicant had stored timber on Port Trust Land No. 5, at the Powder Works Bunder, in April and May, and also for 17 days in October last. He was therefore, under section 394 of the Municipal Act, liable to take out a license, and was noticed accordingly. He however failed to apply for a license and action was taken against him. The Magistrate held him liable to take out a license and ordered him to pay the maximum fee of Rs. 25, as his stacks measured more than 2,000 square feet. The applicant's contention is that, since he kept timber on the land, only for a portion of the year, he should be charged less fee or should be allowed a proportionate refund of the fee paid by him. There is nothing in the Act to justify his request.—S. B. MASTER, Superintendent of Licenses.

No. 27345 of 1894.

Bombay, 15*th March* 1894.

Copy forwarded to the Municipal Secretary with reference to Standing Committee's Resolution No. 13231 of 7th instant. The applicant is not deserving of any consideration, inasmuch as he has made false statements and false charges against the Licensing Department.—H. A. ACWORTH, Commissioner.

No. 13983. Resolution. *Resolved*: " That the following be referred to the Commissioner for favour of report as to how the cost of the works in question can be met:—of the Corporation, No. 13938, dated 19th

instant, as under:—'That the report of the Committee of the Corporation, dated 16th instant (*re* improvement of Wari-Bunder Roads and provision of burial ground for Mahomedans and Beni-Israel), be approved and adopted, and that the Standing Committee be requested to make the necessary financial recommendations.'"

The following statement* was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 18th March 1894.

No. 13984. *Resolved* : "That, as applied for by the Commissioner in his letter No. 27794, dated this day, sanction be given, under section 407 (*b*) of the Municipal Act, to the sale of following rights of collecting squatters' fees at the different Municipal markets and fair ground and feeding fees at the Municipal slaughter houses at Bandora for one year from 1st April 1894 to 31st March 1895 :—

Names of markets.	Names of highest bidders.	Amount realized for 1894-95.	Amount realized for 1893-94.
		Rs.	Rs.
Fort Market	Jivanji and Sons	1,650	1,500
Arthur Crawford Beef Market and Fish and Mutton Markets	Do.	7,325	7,000
Erskine Road Fish Market	Hadji Ahmed Abu	16,750	16,600
Pedder Market	Purushram Gunooji.....	1,560	1,575
Bandora Slaughter Houses Fair Ground and Feeding Fees	Fazalbhoy Peerbhoy	57,000	55,100"

No. 13985. *Resolved* : "That, as applied for by the Commissioner in his letter No. 27640, dated 19th instant, sanction be given to the acceptance by him of the offer of the Manager, Bombay Gas Co., to supply country coke from time to time, during 1894-95 at Rs. 21 per ton.

"That, under the terms of section 72 (3) of the Municipal Act, the Committee dispense with the invitation for tenders, which would otherwise be necessary, as the Company are the only persons in Bombay who manufacture country coke."

Read letter No. 27557, dated 17th instant, from the Commissioner to the Secretary, as under :—

SIR,—The Corporation by their resolution No. 6599 of 12th October 1893, sanctioned the sale of the Carnac Bunder engines and boilers and by their resolution No. 13578 of 15th instant confirmed the sale for Rs. 2,500 of the engines alone. I now request sanction to the transfer of the boilers to the Workshops instead of selling them. New boilers there are urgently needed,

* *See* Appendix **B**.

the certificate for the existing boilers expiring in June, when it will be necessary, as we have been informed by the senior Inspector of Boilers, to reduce the pressure; as they are now working at only 60 lbs., which is barely sufficient, any further reduction will mean their condemnation.—I have, &c., H. A. ACWORTH, Commissioner.

No. 13986. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27557, dated 17th instant, the Corporation be recommended to sanction the transfer of the steam boilers lately used at the Carnac Bunder Depôt to the Municipal Workshops."

No. 13987. *Resolved*: "That the following be *recorded*:—Letter No. 27678, dated 19th instant, from the Commissioner to the Secretary, reporting the sale of the following rights of fishing for one year ending 31st March 1895:—(*a*) In Warli channel and sluices and tank, in Minghat Mandli, to one Narayen Raghoba for Rs. 410; (*b*) at Dharavi sluices to one Pasku Anton for Rs. 30."*

No. 13988. The Committee discussed with the Health Officer the question of the existing system of purchasing bullocks for the Health Department from Messrs. Cursetji & Sons, Kirkee, without calling for tenders for the supply of such animals. The Health Officer stated that on two occasions tenders were called for, and on neither of those occasions did Messrs. Cursetji tender; after resorting to different expedients for procuring the animals required, it was found necessary to go back to Messrs. Cursetji, who, in consequence of having lost the contract, enhanced their prices when the Municipality resumed purchases from them. Messrs. Cursetji do not breed bullocks or keep them on hand, but collect them from many parts of the Dekhan for approval by the Health Department. (See entry on the file of confidential papers kept by the Secretary.)

No. 13989. *Resolved*: "That the following be referred to the Commissioner for favour of remarks:—Petition, dated 19th March 1894, from Messrs. Dhanjibhoy Merwanji, Syed Abdulla and other contractors for the right to collect stall rents of the Foras Road Market, complaining that, owing to the unlicensed bazaar at Kamathipura being allowed to continue, dealers abstain from renting stalls in the new Foras Road Markets; and stating that unless the bazaar in question is closed, no one will bid for the stalls in the new market."

* (*a*) The sale realised Rs. 455 last year.
(*b*) Do. do. „ 25 do.

BOMBAY, 28*th March* 1894.

AT the meeting of the Standing Committee held this day, there were present :—

COWASJEE HORMUSJEE, Esq., G.G.M.C., *Chairman.*

BHALCHANDRA KRISHNA BHATAWADEKAR, Esq., L.M.; E. B. CARROLL, Esq., M.I.C.E.; HURKISONDAS NURROTUMDAS, Esq.; THE HON'BLE MR. JAVERILAL UMIASHANKAR YAJNIK; KAIKHOSRO N. KABRAJI, Esq.; K. M. SHROFF, Esq.; THE HON'BLE MR. R. G. OXENHAM, M.A.; S. REBSCH, Esq., A.M.I.C.E.; G. W. ROUGHTON, Esq.; ACCACIO G. VIEGAS, Esq., L. M. & S.

H. A. ACWORTH, Esq., I.C.S., Commissioner; and the SECRETARY.

The minutes of the meetings held on the 14th and 20th instant, were signed.

The seal of the Corporation was affixed to the following :—(1) to deeds of contract with Messrs. Dewram Keshaoji & Co., for annual repairs, petty works and supply of materials during 1894-95; (2) to ditto with Messrs. Brook & Co., for the supply of 50 tons of Sanctoria coal at the Municipal Workshops ; (3) to ditto with Messrs. Hasan Ali Mulla Hakimji & Brothers, for the supply of 500 kerosine oil lanterns ; (4) to lease for a period of three years, from 1st March 1894, of the chawls and stables on Foras Road, belonging to Bai Perozbai, widow of Mr. Dhunjibhai Dosabhai Mama, and occupied by the bigaries and bullocks of the Health Department, D Ward, at a monthly rental of Rs. 350.

The seal was also affixed to the following :—14 attested duplicate debentures of the Tansa Water Works Loan, Nos. 13711 to 13714, 15695, 15698, of Rs. 500 each, and Nos. 889-90, 19975-76 to 19779-80, 19697-98, and 19699-700, of Rs. 1,000 each ; 1 attested duplicate debenture of the Sanitary Works Loan of 1888, No. 435-36, of Rs. 1,000 ; 2 ditto of the 35 lakhs various Sanitary Works Loan, No. 1563-64, of Rs. 1,000, and No. 3241-60, of Rs. 10,000; 2 subdivided debentures of the Tansa Water Works Loan, Nos. 891 and 892, of Rs. 500 each.

No. 14084.

Resolved : " That, as applied for by the Commissioner in his memoranda Nos. 27860 to 27869, dated 22nd instant, and No. 27952, dated 27th idem, sanction be given, under section 351 (2) of the Municipal

Act, to the removal of the following structures built without permission :—

Names of Owners.	Where.
Mr. Phillip Miranda	Building at Hasali Tank Road.
The Manager of Mr. Kuberdas Dulabdas	„ „ No. 59, Upper Mahim.
Hadji Votti Hadji Oosman ...	„ „ No. 23-25, Huzria St.
Mr. Raghoojee Khimjee, agent for the Jain Mill Co., Limited ...	„ „ No. 654, Junction of Supari Baug and Parel Roads.
„ Kalecharam Binda Prasad ...	„ „ Belvedere Hill Road.
„ Abdul Baba Kaleshar... ...	„ „ DeLisle Road.
„ Vandrawandas Purshotumdas..	„ „ No. 4, Ambawadi, Girgam Road.
Hadji Mahomed Hadji Hussein ...	„ „ Warli Road near Love Grove Pumping Station.
Mr. Krishnaji Devji	„ „ DeLisle Road.
„ P. T. L. Pereira	„ „ Dadar, Kumbarwada.
„ Krishna Sittaram Demotte ...	„ „ No. 158, New Hanuman Lane."

Resolved : " That, as applied for by the Commissioner in his memorandum No. 27993, dated this day, sanction be given to the cutting off of water connections as per list submitted therewith."

No. 14085.

Read letter No. 27924, dated 22nd instant, from the Commissioner to the Secretary, as under :—

SIR,—I propose, with the approval of the Standing Committee, to allow the Drainage Engineer, Mr. James, to draw pay at the rate of Rs. 850 during the current financial year. This will give him the usual increment of Rs. 50. From October 1891 until the end of January 1893, or while Mr. Smith was acting Executive Engineer, Mr. James drew as Acting Drainage Engineer Rs. 833 per mensem, but the transfer of Mr. Smith to a special appointment made Mr. James sub *pro tem.* and reduced him to Rs. 800, the pay on which an incumbent of the posts of Water and Drainage Engineers begins. Mr. Murzban has spoken very strongly to me on Mr. James' behalf, and his work is so satisfactory that it would be unfair to deprive him of the rise proposed, particularly when it is remembered that it does little more than put him in the position he occupied two years ago and more.—I have, &c.,—H. A. ACWORTH, Commissioner.

Proposed by G. W. Roughton, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik,—

" That, in the opinion of the Standing Committee, the application to increase the salary of Mr. C. C. James from Rs. 800 to Rs. 850 per mensem is premature."

No. 14086.

Amendment, proposed by S. Rebsch, Esq.—

"That the Commissioner be asked to deal with the question of the increments of Mr. James's salary in accordance with the rules in force."

Not seconded.

Amendment, proposed by E. B. Carroll, Esq.—

"That letter No. 27924, dated 22nd instant, from the Commissioner, be *recorded*."

Not seconded.

Amendment, proposed by the Hon'ble Mr. Oxenham, seconded by S. Rebsch, Esq.—

"That Mr. James be given the pay to which he would be entitled if he had been appointed substantively to his present appointment at the date when he was appointed sub *pro tem.*"

On a division, the votes were *recorded* as under :—

	For.	*Against.*	
Amendment	3	6	*Lost.*
Original motion	6	3	*Carried.*

Considered again memorandum No. 27572, dated 19th instant, from the Commissioner, requesting sanction to the transfer of Rs. 6,000 to meet excess on the grant for Water Works material.

The following statement was handed in by the Commissioner :—

List of some of the special materials purchased for the use on the maintenance works during the year 1893-94.

Particulars.	Amount.	Remarks.
	Rs. a. p.	
9 bogie pipe trucks	3,600 0 0	Purchased from Walsh, Lovett & Co.
1 set of diving apparatus	1,000 0 0	
Sledge hammer, shovel, crowbars, spanners, chains, &c.	50 0 0	
Cement, Portland	1,079 15 8	For repair of culvert on Tansa line washed out during the monsoon.
Delta metal bolts, nuts, &c.	456 6 8	For Kasheli Bridges.
48" pipe cutting tools and mushets, steel	238 11 0	To cut 48" pipes, &c.
Oil and paint to paint bridges and culverts	1,500 8 8	Principally Kasheli Bridges.
Total ...Rs.	7,920 9 7	
Besides these there are other charges for stores used on 48" and 27" bursts on Tansa line from 1st November 1893, the date on which maintenance period expired.		

S. TOMLINSON, M. INST. C. E.,
Water Engineer.

Proposed by K. M. Shroff, Esq., seconded by the Hon'ble Mr. Javerilal U. Yajnik,—

No. 14087. "That, with reference to memorandum from the Commissioner, No. 25572, dated 19th instant, the Standing Committee be furnished with a complete list of the articles purchased last year out of the budget grant for materials, water works.

"That the consideration of the memorandum be postponed in the meantime."

Amendment, proposed by E. B. Carroll, Esq., seconded S. Rebsch, Esq.,—

"That, as applied for by the Commissioner in his memorandum No. 27572, dated 19th instant, and subject to the approval of the Corporation, under section 133 (2) of the Municipal Act, sanction be given to the transfer of Rs. 6,000 from savings in III, water works, section I, establishment and labour, to section II, materials, to meet excess on the latter head due to insufficient budget provision."

On a division, the votes were *recorded* as under :—

	For	*Against.*	
Amendment	4	5	*Lost.*
Original motion	5	2	*Carried.*

No. 14088. *Resolved* : "That, as applied for by the Commissioner in his memorandum No. 27848, dated 22nd instant, sanction be given to the transfer of Rs. 100, from savings in section 5, lighting slaughter houses, to section 9, contingencies, printing and stationery, markets, to meet excess on the latter section, due to the purchase of sand, flower-pots, &c., for the compound of the Arthur Crawford Markets."

No. 14089. *Resolved* : "That, as applied for by the Commissioner in his letter No. 27749, dated 20th instant, sanction be given, under section 8 of the new Pension Regulations, to Mr. Mahadeorao Ramchander Natu, Inspector, Engineer's Department, being allowed to contribute to the Pension Fund from 12th August 1892, the date of his permanent employment."

No. 14090. *Resolved* : "That the following be *recorded* :—Letter No. 27793, dated 20th instant, from the Commissioner, stating, with reference to the Committee's resolution No. 5015, dated 30th August 1893,

(sanctioning the leasing to the Commissioner of Police of certain plots of Municipal ground as sites for Police Chowkies), that the Executive Engineer reports that Chowkey No. 9, for which a ground rent of Rs. 26·36 is charged, is situated at the junction of Foras and Falkland Roads, and not Falkland and Tardeo Roads as previously reported."

No. 14091. *Resolved*: "That the following be *recorded*:—Letter No. 27960; dated 27th instant, from the Commissioner, reporting that the total cost of the street name-plates and notice-boards, to be purchased from Messrs. Latham & Co., will be increased from Rs. 973-14-6 to Rs. 1,073-1-6, due to fall in exchange and imposition of import duty. The amount will be met from the grant for the purchase of tin-plates and street-boards."

No. 14092. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27930, dated 26th instant, the Committee approve, under section 230 of the Municipal Act, of an order in writing being given to Mr. Sittaram Luxmon, authorising him to lay a drain for his premises, situate at Currey Road, by carrying the same into, through or under the land belonging to (1) Mr. Palanji Ratanji Contractor, (2) Mr. Janardhan Ranchod, and (3) Messrs. E. D. Sassoon & Co."

No. 14093. *Resolved*: "That, as applied for by the Commissioner in his letter No. 27944, dated 27th instant, sanction be given, under section 69 (*e*) of the Municipal Act, of the variation of the contract with Mr. Sorabji Jamshedji for the construction of latrines and urinals on the Kennedy Sea Face Gardens at Charney Road, whereby the period of the work shall be extended up to 15th March 1894. The cost of the establishment charge for the extended period being recovered from him."

In accordance with notice, it was proposed by Bhalchandra K. Bhatawadekar, Esq.,—

No. 14094. "That the Municipal Secretary be requested to report to the Committee, within one month, any instances when the accounts and contracts in connection with the Leper Asylum at Matunga, from the date of its opening to the present month, have been reported to the Standing Committee."

The motion was seconded by Kaikhosro N. Kabraji, Esq., and *carried*.

The consideration of the following notice of motion from Mr. G. W. Roughton was, after discussion, postponed till next meeting:—"That resolution of the Standing Committee No. 13977, dated 20th instant, be rescinded or modified."

No. 14096. *Resolved*: "That the following be referred for report to a Sub-Committee consisting of Messrs. S. Rebsch, K. M. Shroff and Kaikhosro N. Kabraji:—Letter No. 25059, dated 20th ultimo, from the Commissioner, requesting sanction of the Standing Committee and Corporation to the expenditure of Rs. 6,161 for certain additional articles of furniture required and for certain alterations of furniture for the Municipal Office. The amount to be met out of savings in the grant for the office furniture, fittings, &c."

No. 14097. *Resolved*: "That, as applied for by the Commissioner in his memorandum No. 27954, dated 27th instant, the Corporation be recommended to sanction the signing of cheques for the following expenditure not separately provided for in the budget for 1894-95, as advances to be subsequently adjusted against budget grants or by cash recoveries :—

	Rs.
Advances to Municipal officers	15,000
Private and departmental works	1,00,000
General stock (carbolic acid powder, disinfectants, &c.)	25,000
Building and repair certificate and water connection forms	2,000
Purchase of stores for water works maintenance, new works	1,00,000

The following return was read and *recorded* :—

No. 14098. Return of fires at Gorupdeo Road (Alexandra Mill) and Lower Colaba (Old Nicol Mill), forwarded with the Commissioner's memorandum No. 27679, dated 19th March 1894.*

The following statement † was laid on the table :—

Statement of the height of water in the Vehar, Tulsi, Pawai and Tansa Lakes for the week ending 25th March 1894.

* *See* Appendix C. † *See* Appendix B.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 27953, dated 27th instant, sanction be given to the transfer of Rs. 400 from savings in the grant for town duty collection, commission and contingencies, B. B. & C. I. Railway Company, to same head, Port Trust, to meet excess on the latter head, due to a larger amount of town duty having been collected by the Port Trust than that estimated for when the budget estimates for 1893-94 were framed."

No. 14099.

Resolved : "That, as applied for by the Commissioner in his memorandum No. 28030, dated this day, sanction be given to the transfer of Rs. 500 from savings in the grant for B, public lighting branch, section 2, gas lighting, A, streets and bundars, to same head, same section, E, contingencies, to meet excess due to cost of experiments with the incandescent lights and that of shifting and altering certain lamps in the Princes and Victoria Docks being debited to this grant."

No. 14100.

The consideration of letter No. 27961, dated 27th instant, from the Commissioner, requesting sanction to the employment of two clerks on Rs. 50 and 40 each per mensem for the preparation of return of halalkhor service rendered, &c., was postponed till next week.

H. WYNFORD BARROW,
Municipal Secretary.

STANDING COMMITTEE OFFICE,
BOMBAY, *April* 1894.

Appendix A.

Health Officer's Report for the First Quarter of 1893.

THE general health of the city has been more or less favourable during the quarter.

Although the mortality is less than in the preceding quarter and less than in the same months in the year before, yet I look to the future of the public health with some apprehension. It is not possible to look to the future except with some anxiety when we consider that there has been an enormous increase of the water supply to this Island from some 16½ million gallons to about 29 million gallons daily since 1892 and very little increase in the number of drains to carry this water away and that there will probably be slow progress in the construction of drains in the future. I hope much in the future from the increased pumping power, but drains must be constructed to carry the water to the tributaries of the pumps. However effective the pumps may be, there must be drains in the districts which now have no drains if the pumps are to have a full effect and do good. The first fundamental principle regarding the public health is that the water coming into the City should be taken out of it, and this first principle cannot be applied in Bombay until the Island has been drained. In some of the open drain tributaries* as in Foras Road and Ripon Road the sewage we have seen flowing back.

I have had to draw attention not only to stagnation in sewage ways, but to the reflux of sewage. This is due to pumping powers not being able to remove all the water which flows into the sewers.

The apprehensions I felt when the Tansa water was introduced into Bombay have not been unfounded, for they have been justified. In the first quarterly report of 1892 I wrote as follows :—

"I look with some apprehension on the future from the introduction "of Tansa water. It must be remembered that a little more than "half the Island has no drains, that all the refuse of the City is "deposited in a depression midway in the Island, under condition "which cannot now be considered safe."

There is even now with incomplete drainage an enormous quantity of water which the pumping power is unable to remove—some millions of gallons which may be considered a floating balance indicating danger.

I must also point out that the water currents round the Island have been obstructed by the causeways and embankments at Mahim

* NOTE.—This is owing to the inefficiency of the present pumps. We expect to keep the sewers clear with the new pumps.—H. A. ACWORTH, Municipal Commissioner.

and Coorla. Be it remembered that the most offensive trades of Bombay discharge into this Estuary at Dharavee and that the Estuary at Dharavee at low water is fœtid. The Estuary is silting up. The water ways under the causeway and the embankments should be widened.

With so much water running to waste, the time has come to consider whether some of the water could not be used to a purpose, whether some of the ancient tanks, at one time works of great charity, could not be made into swimming baths. It is very desirable that the Municipality should as a health measure construct baths open to all classes and free of all charge, not only in the City, but on the foreshore.

There has been a considerable decrease in the total number of deaths compared with the corresponding quarter of the preceding four years as shewn below :—

	Total No. of Deaths.
1889	5,854
1890	6,060
1891	5,706
1892	7,194
1893	5,390

The chief decrease of mortality, contrasted with the corresponding quarter of the last year, will be observed from the following causes —

	1st Quarter 1892.	1st Quarter 1893.
Small-pox	321	40
Measles	351	72
Fevers	2,235	1,324
Nervous system	534	421
Res. system	1,344	1,214
Debility	555	413

Exclusive of still-born, 5,390 deaths were registered, being 507 less than in the preceding quarter and 1,804 less than in the corresponding quarter of the last year. The death-rate is equal to 26·23 per 1,000 of population calculated on the census of 1891.

Examining the statistics according to place of birth, we find that 2,785 persons, including still-born, were born in Bombay, that 2,836 were born out of Bombay, and that the place of birth of 51 persons could not be ascertained.

The Fever mortality is 207 less than in the last quarter, 929 less than in the corresponding period of the last year, and 545 less than the average of the preceding five years. Of the total deaths from fevers 1,079 were referred to remittent fever, being 173 less than in the last quarter and 749 less than in the corresponding period of the last year. 153 were ascribed to simple continued fever, being 31 less than in the previous quarter and 156 less than in the corresponding period of the last year. 68 were ascribed to ague, being 5 less than in the last quarter and 28 less than in the corresponding period of the last year. 6 were referred to enteric fever. In all 1,306 deaths were ascribed to Fevers.

The mortality from Small-pox is 39 more than in the last quarter, but 281 less than in the corresponding quarter of the last year.

From Measles 72 deaths were registered, being 60 more than in the preceding quarter, but 279 less than in the corresponding months of the past year.

The mortality from Cholera is 33 less than in the last quarter, but 3 more than in the corresponding period of the last year. There were 10 cases, of which 7 proved fatal.

The deaths from diseases of the Respiratory system were 71 more than in the last quarter, but 129 less than in the corresponding quarter of the last year. 1,215 deaths were registered under the head of diseases of the Respiratory system. Of these, 723 were ascribed to Bronchitis, being 6 more than in the last quarter, but 82 less than in the corresponding quarter of the last year. 300 were referred to Pneumonia, being 38 more than in the last quarter, but 51 less than in the corresponding period of the last year.

From diseases of the Digestive system 576 deaths were registered, being 1 more than in the last quarter and 49 more than in the corresponding quarter of the last year. To Diarrhœa 265 deaths were referred, being 13 less than in the last quarter, but 38 more than in the corresponding period of the past year. To Dysentery 165 deaths were due, being 6 more than in the last quarter and 31 more than in the corresponding quarter of the past year. To all other diseases of the Digestive system 146 deaths were referred, being 8 more than in the last quarter, but 20 less than in the corresponding months of the past year.

To affections of the Nervous system 421 deaths were ascribed, being 163 less than in the last quarter and 113 less than in the corresponding months of the last year.

1 death from Hydrophobia was reported.

There were 17 deaths from Puerperal Fever.

The mortality from Phthisis is 86 less than in the last quarter, but 24 more than in the corresponding period of the last year.

From diseases of the Generative system 43 deaths were registered, being 42 less than in the last quarter and 6 less than in the corresponding quarter of the past year.

To disease of the Circulatory system 31 deaths were referred, being 6 less than in the last quarter and 10 less than in the corresponding period of the last year.

9 deaths were registered under the head of Leprosy, being 7 less than in the last quarter and 1 less than in the corresponding period of the last year.

To the general affection Dropsy 61 deaths were ascribed, being 30 more than in the last quarter and 35 more than in the corresponding months of the past year.

From diseases of the Urinary system 22 deaths were registered, being 3 more than in the past quarter, but 2 less than in the corresponding quarter of the past year.

To diseases of the organs of locomotion and cellular tissue 18 deaths were referred, being 3 less than in the past quarter and 8 less than in the corresponding quarter of the past year.

8 deaths were referred to affections of the Cutaneous system, being 4 more than in the last quarter and 5 more than in the corresponding quarter of the last year.

The deaths from old age and debility were 159 less than in the last quarter and 142 less than in the corresponding quarter of the last year.

The deaths from accidents and violence amounted to 103, being 3 more than in the last quarter and 7 more than in the corresponding quarter of the last year. 15 deaths were ascribed to poisoning, being 3 less than in the last quarter, but 7 more than in the corresponding period of the last year. Of the deaths from poisoning 6 were suicidal, 9 accidental; of the latter 2 were from snake-bite. The deaths from drowning were 1 more than in the last quarter, but 8 less than in the corresponding quarter of the last year, 11 suicidal, 8 accidental, and in 4 instances the circumstances under which death took place were not known.

The rate of mortality amongst the chief races living in the city is shown below :—

	Annual rate per 1,000 of popultion.
Hindus	23·60
Hindus, low-caste	35·68
Mussulman	34·68
Parsees	19·21
Europeans	19·48

The infant mortality is 276 less than in the last quarter and 1,319 less than in the corresponding quarter of the past year. 1,901 children under 4 years of age died.

	No. of deaths.	Per 1,000.
Under 1 year	1,248	197·38
„ 2 years	403	119·38
„ 3 „	166	46·94
„ 4 „	84	25·98

At the burying and burning grounds of the City 3,431 bodies were buried, 1,996 burnt, and 245 conveyed to the Towers of Silence.

3,510 living—1,786 male, 1,724 female—and 282 still-born births were registered, being 246 less than in the corresponding quarter of the last year. The proportion of males to females by the last Census was 170·60 to 100, but assuming that there were 100 males to 100 females, the birth-rate would be equal to 29·13.

T. S. WEIR,
Health Officer.

BOMBAY, 18*th May* 1893.

APPENDICES.

RETURN SHOWING THE NUMBER OF DEATHS AND THE ANNUAL RATE OF MORTALITY DURING THE FIRST QUARTERS OF 1892 AND 1893.

Wards.	Localities.	Number of Deaths, exclusive of Still-born, in 1892.	Annual Rate of Mortality per 1,000 of Population.	Number of Deaths, exclusive of Still-born, in 1893.	Annual Rate of Mortality per 1,000 of Population.
A	Upper Colaba	24	22·14	33	30·45
	Middle and Lower Colaba	84	24·66	75	22·02
	Fort, Southern	3	3·03	5	5·06
	„ Northern	234	28·49	189	23·01
	Esplanade	50	19·87	23	9·14
B	Mandvie	482	51·69	276	29·60
	Chukla	363	45·09	274	34·04
	Oomarkhari	625	47·64	413	31·48
	Dongree	336	44·33	170	22·42
C	Market	294	26·27	226	20·20
	Dhobi Talao	349	34·94	273	27·33
	Fanasvadi	142	23·59	117	19·44
	Bhuleshwar	323	33·67	235	24·50
	Khara Talao	314	46·45	237	35·06
	Kumbharwada	345	42·84	235	29·18
D	Khetwadi	208	28·87	140	19·43
	Girgaum	241	35·70	187	27·70
	Chaupati	42	14·59	21	7·29
	Walkeshwar	59	18·16	38	11·70
	Mahaluxmi	81	19·04	58	13·63
E	Mazagon	224	26·63	189	22·47
	Tarwadi	131	24·60	88	16·50
	2nd Nagpada	250	53·28	214	45·60
	Kamatipura	423	57·93	295	40·40
	Tardeo	181	38·14	170	35·82
	Byculla	407	34·34	321	27·08
	1st Nagpada	126	45·27	92	33·05
F	Parel	350	48·71	277	38·55
	Sewree	46	30·34	45	29·68
	Sion	68	13·87	109	22·24
G	Mahim	119	25·72	125	27·01
	Worli	136	21·33	116	18·20
Water Division		19	3·43	17	3·07
Non-resident and unknown		115	.....	107	.....
	Total...	7,194	35·01	5,390	26·23

RETURN OF BIRTHS AND DEATHS FOR THE FIRST QUARTER OF 1893.

Months.	Births.	Deaths.														
		Small-pox.	Measles.	Cholera.	Fevers.	Digestive System.			All other Causes.	All Causes, except Still-born.	Annual Rate of Mortality per 1,000 of Population.	Barometer.	Temperature of Air.	Dew-point.	Humidity of Air.	Total fall of Rain at Colaba.
						Diarrhœa.	Dysentery.	All other Diseases under Digestive System.								
January	1,364	2	10	4	452	97	79	49	1,117	1,810	26·43	29·907	74·0	62·4	·68	...
February	1,065	6	20	...	412	91	44	39	1,103	1,715	25·04	·940	73·2	61·4	·68	·14
March	1,081	32	42	3	442	77	42	58	1,169	1,865	27·23	·866	78·3	68·3	·72	...
Total...	3,510	40	72	7	1,306	265	165	146	3,389	5,390	26·23	29·904	75·2	64·0	·69	·14
Corresponding Quarter...	3,756	321	351	4	2,235	227	134	166	3,756	7,194	35·01	29·868	78·4	67·1	·69	...

RETURN showing the Number of Children successfully and unsuccessfully Vaccinated, Number whose Vaccination has been postponed, and the Number certified to be insusceptible of Successful Vaccination during the First Quarter of 1893.

Quarter.	Number of Children successfully Vaccinated.			Number of Children unsuccessfully Vaccinated.	Number of Children whose Vaccination has been postponed.	Number of Children certified to be insusceptible of successful Vaccination.	Remarks.
	Under 1 year.	Under 14 years.	Total.				
1st Quarter of 1893...	5,320	1,346	6,666	57*	47	*Nil.*	* The unsuccessful result refers to "primary operations" only.

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Health Officer's Report for the Second Quarter of 1893.

Although the health of the City during this quarter has not been as favourable as in the preceding three months of the year, the mortality has been less than in the corresponding quarter of the last year.

In the Annual Report of 1892, I have described serious nuisances from absence of drainage or from imperfect drainage. There is, however, a serious nuisance from absence of drains in a densely populated area on which are mills and chawls densely crowded, to which I would draw attention now. I refer to an area, triangular in shape, bounded on three sides by roads, the base being Parel Road, the north side being Kalachowki Road, and the south side Chinchpoogli Road, running from the Fire Brigade Station past the Health Department stables and joining Kalachowki Road, the north boundary of the area. On two sides of this triangle, sewage is seen flowing down the streets. The junction of Parel Road and Kalachowki Road has been during the rains a cesspool, and people have had to walk through the sewage and water.

There are, within this area, eight mills, but not one public drain. The drainage system ought to be extended at once to this locality.*

Exclusive of still-born, 6,500 deaths were registered, being 1,110 more than in the last quarter, but 257 less than in the corresponding months of the past year. The death-rate is equal to 31·63 per 1,000 of population, calculated on the Census of 1891.*

Examining the statistics according to place of birth, we find that 3,509 persons, including still-born, were born in Bombay, 3,295 were born out of Bombay, and that the place of birth of 50 persons could not be ascertained.

The Fever mortality is 763 more than in the preceding quarter, but 91 less than in the corresponding period of the last year and 230 more than the average of the preceding five years. Of the total deaths from Fevers, 1,670 were referred to Remittent Fever, being 591 more than in the last quarter, but 58 less than in the corresponding quarter of the last year; 314 were ascribed to Simple Continued Fever, being 161 more than in the past quarter and 8 less than in the corresponding quarter of the last year; 81 were ascribed to Ague, being 13 more than in the last quarter, but 26 less than in the corresponding period of the last year; 4 were

* I concur with the Health Officer. Estimates are being prepared.—H. A. A.

referred to Enteric Fever, being 2 less than in the last quarter. In all, 2,069 deaths were ascribed to Fevers.

The mortality from Small-pox is 79 more than in the last quarter, but 81 less than in the corresponding quarter of the last year.

From Measles 144 deaths were registered, being 72 more than in the last quarter and 147 less than in the corresponding quarter of the past year.

The mortality from Cholera is 49 more than in the last quarter and 17 more than in the corresponding months of the past year. There were 68 cases, of which 56 proved fatal.

The deaths from diseases of the Respiratory System were 45 less than in the last quarter, but 133 more than in the corresponding quarter of the last year ; 1,170 deaths were registered under the head of diseases of the Respiratory System. Of these, 661 were ascribed to Bronchitis, being 62 less than in the last quarter and 48 less than in the corresponding period of the last year ; 277 were referred to Pneumonia, being 23 less than in the last quarter, but 96 more than in the corresponding months of the past year.

From diseases of the Digestive System 525 deaths were registered, being 51 less than in the last quarter and 53 less than in the corresponding quarter of the last year. To Diarrhœa 277 deaths were referred, being 12 more than in the last quarter and 5 less than in the corresponding quarter of the last year. To Dysentery 95 deaths were due, being 70 less than in the last quarter and 43 less than in the corresponding quarter of the last year. To all other diseases of the Digestive System 153 deaths were referred, being 7 more than in the last quarter, but 5 less than in the corresponding quarter of the past year.

From affections of the Nervous System 465 deaths were registered, being 44 more than in the last quarter, but 113 less than in the corresponding quarter of the last year.

There were 37 deaths from Puerperal Fever.

No death from Hydrophobia was registered.

The mortality from Phthisis is 72 less than in the last quarter and 29 less than in the corresponding quarter of the last year.

To diseases of the Circulatory System 67 deaths were referred being 36 more than in the last quarter and 37 more than in the corresponding quarter of the last year.

From diseases of the Generative System 37 deaths were registered, being 6 less than in the last quarter and 30 less than in the corresponding months of the past year.

There were 9 deaths registered under the head of Leprosy, being 1 less than in the corresponding quarter of the last year.

To the general affection—Dropsy—19 deaths were ascribed, being 42 less than in the last quarter and 8 less than in the corresponding quarter of the last year.

13 deaths were registered under the head of Diseases of the Urinary System, being 9 less than in the last quarter and 4 less than in the corresponding quarter of the last year.

From diseases of the organs of Locomotion and Cellular Tissue 12 deaths were registered, being 6 less than in the last quarter and 15 less than in the corresponding quarter of the last year.

To diseases of the Cutaneous System 6 deaths were referred, being 2 less than in the last quarter and 1 less than in the corresponding quarter of the past year.

Six premature births were registered.

The deaths from Old Age and Debility were 217 more than in the last quarter and 64 more than in the corresponding quarter of the last year ; 630 were registered.

The deaths from Accidents and Violence amounted to 93, being 10 less than in the past quarter and 5 less than in the corresponding months of the last year ; 13 deaths were ascribed to Poisoning, being 2 less than in the past quarter and 9 less than in the corresponding quarter of the last year. Of the deaths from Poisoning, 6 were suicidal and 7 accidental ; of the latter one was from snake-bite. The deaths from Drowning were 3 less than in the last quarter, 12 were suicidal, 6 accidental, and in two instances the circumstances under which death took place were not known.

The rate of mortality amongst the chief races living in the City is shown below :—

	Annual rate per 1,000 of population.
Hindus	28·11
Hindus, low-caste	49·50
Mussulman	40·85
Parsees	28·40
Europeans	17·00

The infant mortality is 1,027 more than in the last quarter, but 428 less than in the corresponding quarter of the past year ; 2,928 children under 4 years of age died.

	No. of deaths.	Annual rate of mortality per 1,000.
Under 1 year	1,938	306·51
„ 2 years	647	191·66
„ 3 „	237	67·02
„ 4 „	106	32·78

At the burying and burning grounds of the City, 4,386 bodies were buried, 2,115 burnt, and 353 conveyed to the Towers of Silence.

3,742 living—1,964 male and 1778 female—and 354 still-born births were registered, being 232 more than in the last quarter and 194 more than in the corresponding quarter of the last year. The proportion of males to females by the last Census was as 170·60 to 100 ; but assuming that there were 100 males to 100 females, the birth-rate would be equal to 31·06.

T. S. WEIR,
Health Officer.

BOMBAY MUNICIPALITY.

RETURN SHOWING THE NUMBER OF DEATHS AND THE ANNUAL RATE OF MORTALITY DURING THE SECOND QUARTERS OF 1892 AND 1893.

Wards.	Section.	Number of Deaths, exclusive of Still-born, in 1892.	Annual Rate of Mortality per 1,000 of Population.	Number of Deaths, exclusive of Still-born, in 1893.	Annual Rate of Mortality per 1,000 of Population.
A	Upper Colaba	17	15·68	22	20·29
	Middle and Lower Colaba	99	29·07	87	25·54
	Fort, Southern	8	8·09	5	5·06
	„ Northern	259	31·54	280	34·09
	Esplanade	69	27·42	45	17·88
B	Mandvi	456	48·90	354	37·96
	Chukla	332	41·24	325	40·37
	Oomarkhari	568	43·30	512	39·03
	Dongri	276	36·41	235	31·00
C	Market	290	25·92	328	29·31
	Dhobi Talao	324	32·94	331	33·14
	Fanasvadi	148	24·59	126	20·93
	Bhuleshwar	312	32·53	274	28·59
	Khara Talao	300	44·38	305	45·12
	Kumbharwada	317	39·36	293	36·38
D	Khetwadi	207	28·73	238	33·03
	Girgaum	211	31·26	225	33·33
	Chaupati	57	19·80	45	15·63
	Walkeshwar	59	18·16	42	12·93
	Mahalakshmi	57	13·40	60	14·10
E	Mazagon	208	24·73	221	26·27
	Tarwadi	116	21·78	106	19·90
	2nd Nagpada	219	46·67	249	53·06
	Kamathipura	346	47·39	312	42·73
	Tardeo	197	41·51	183	38·56
	Byculla	404	34·09	373	31·47
	1st Nagpada	129	46·34	108	38·80
F	Parel	328	45·65	326	45·37
	Sewri	47	31·00	32	21·11
	Sion	94	19·18	113	23·06
G	Mahim	113	24·42	104	22·48
	Worli	80	12·55	97	15·21
Water Division		20	3·61	21	3·79
Non-resident and unknown		90	.....	123	.....
	Total...	6,757	32·89	6,500	31·63

RETURN OF BIRTHS AND DEATHS FOR THE SECOND QUARTER OF 1893.

Months.	Births.	Deaths.										Barometer.	Temperature of Air.	Dew-point.	Humidity of Air.	Total fall of Rain at Colaba.
		Small-pox.	Measles.	Cholera.	Fevers.	Digestive System.			All other Causes.	All Causes, except Still-born.	Annual Rate of Mortality per 1,000 of Population.					
						Diarrhœa.	Dysentery.	All other Diseases under Digestive System.								
April	1,058	53	60	23	721	102	35	54	1,291	2,339	34·15	29·791	83·5	73·1	·72	·02
May	1,425	42	60	23	831	85	29	54	1,154	2,278	33·26	·756	84·3	75·4	·75	6·30
June	1,259	24	24	10	517	90	31	45	1,142	1,883	27·49	·650	82·2	76·5	·83	21·47
Total...	3,742	119	144	56	2,069	277	95	153	3,587	6,500	31·63	29·732	83·3	75·0	·77	27·79
Corresponding Quarter...	3,548	200	291	39	2,169	282	138	158	3,489	6,757	32·89	29·725	85·1	76·2	·75	13·41

RETURN showing the Number of Children successfully and unsuccessfully Vaccinated, the Number whose Vaccination has been postponed, and the Number certified to be insusceptible of Successful Vaccination during the Second Quarter of 1893.

Quarter.	Number of Children successfully Vaccinated.			Number of Children unsuccessfully Vaccinated.	Number of Children whose Vaccination has been postponed.	Number of Children certified to be insusceptible of successful Vaccination.	Remarks.
	Under 1 year.	Under 14 years.	Total.				
2nd Quarter of 1893...	3,363	686	4,049	62†	44	*Nil.*	† The unsuccessful result refers to "primary operations" only.

Health Officer's Report for the Third Quarter of 1893.

In anticipation of the usual Quarterly Report, I submit a report on the health of the City during the third quarter. The figures are subject to considerable correction, especially in regard to the mortality by localities and the causes of death.

The most important event of the quarter has been the disturbance of the peace and the disorder which resulted in the riots and the deaths of 82 people.

The incidence of the weekly mortality is well seen in the following diagram and the line indicating the rise in the number of deaths in the weeks ending the 8th and 15th of August will be observed.

I first heard from the stables at Boree Bunder, Null Bazaar and Kamathipura of disturbances. It was reported that the scavengers and halalkhores had been driven in and the carts driven off, and that an attempt had been made to rush and wreck the Health Department stables in Kamathipura. The Assistant Health Officer and I left office at once. My first observation of the riots was near the Market. As we came near the Market we met troops being hurried up and passing by Pydhowni into Bhendy Bazaar, we saw the street covered with stones and many pools of blood and many stains of gore. We now saw many evidences of the struggle—wounded men, injured Police officers—but not until the next day did I see any woman hurt. Walking down Bhendy Bazaar, Mr. Leask and I passed up Obelisk Road on to Grant Road through crowds in much tumult and excitement, who told of incidents in the turbulence. The object of our visit was to keep our halalkhores within their dwellings—the fine buildings—the halalkhore chawls in Cursetji Suklaji Street. As we came up, we saw excited halalkhores outside the buildings. We took them all inside the buildings and warned them to keep inside. Many of the halalkhores had been injured, yet in excitement their chief desire was to come forth and take a greater part in the fray. Having looked at those injured, I warned the halalkhores not to leave the open space between their dwellings. We passed up through Kamathipura, where there were still bands of rioters in the streets, and we saw the destruction that had been wrought to dwellings and property. Near our stables in Kamathipura we met Inspector Hallums and Inspector Powell. Inspector Powell had defended his stables and he kept back rioters who had tried to enter them. We found nearly

200 carts of C and B Wards collected around Kamathipura Stables for protection. Many of the drivers had been injured. Our first care was to encourage and give heart to the cart-drivers and persuade them to drive back the carts through Kamathipura. It was not easy to persuade them, for we had to pass by the Two Tanks—the scene of much strife later in the evening, where the rioters had to be fired on. Just before this, you passed me. We took the carts down Duncan Road back to the stables in Null Bazaar. The drivers really acted well, considering the panic and the apprehensions which they not unnaturally felt. The halalkhores would have fared worse than the Mahars for they were the only people beaten by both—Mussulman and Hindoo. As one halalkhore said, he was beaten by Hindoos because he had a long beard, and he was beaten by Mussulman because he was dressed like a Hindoo. Immediately after taking the carts by the Two Tanks back to the Stables we hastened to the scene of a conflagration in Byculla, and on the way we heard that our Milch Cattle Stable had been set on fire. We found the stable on fire, but it was quickly extinguished. The next day the Night Branch cart-drivers, over 200 in number, most of whom are Mussulmen, were besieged in the Night Branch Stables in Kamathipura. Inspector Hallums, with his staff, held the stable during the night and part of the day until military aid came. On the 15th August last, I wrote to you as follows :—

"That the work of the Health Department is now in full "progress, and I may say the men are now working with a little "confidence; but although the men have gone to work with "some confidence, still I cannot conceal the fact that any assault, "especially on halalkhores, may cause an interruption in the "sanitary operations. I regret that a large number of the "Superintending Establishment are absent, and I have issued an "order that any Sub-Inspector or Muccadum absent from duty "to-morrow morning will be suspended and may be dismissed. "I have no doubt that some have been injured and are unable "to attend. I think it necessary on this occasion to point out "that the system of guards has not afforded any protection to "the halalkhores in their work. The system is effective for "taking people in safety to their houses, but it is not a system "which can protect men working in narrow lanes and gullies. "In the first place, the halalkhores are ordinarily at feud with "almost everybody. In the next place, the guard sent with a "halalkhore will only go a certain distance, and the individual "halalkhore while at work is not protected, and in the third place, "the halalkhore, if hit, say, with a stone, does not, from the halal-"khore point of view, feel satisfied unless that the person who has "hit him is caught and punished there and then. The fact is that it "is not the injuries that they have received which have frightened "them; it is the injuries which they anticipate while up gullies. "In case, unhappily, of any further disturbance, it might be

"advisable to consider whether the Assistant Health Officer should "not in proceeding with any escort protecting our men have the "powers of a Special Magistrate. The halalkhores should know "that officers over them have the power of protecting them and "of dealing with persons molesting them.

"I have to recommend that 18 revolvers, ·360 with belts, be "served to Inspectors and Sub-Inspectors, who should wear them "outside their uniform, so that the halalkhores and dheds may see "that the Officers over them are armed.

"I have also to suggest that rooms be erected in each stable "where Inspectors and Sub-Inspectors may, in case of emergency, "sleep. The Inspectors and Sub-Inspectors have been sleeping "anywhere in some of the stables. It is necessary that the Superin-"tending Staff should not suffer in any way during a crisis and "at a time when they cannot be off duty."

Even for days afterwards in Kamathipura, and in other portions of the City, sanitary work was performed with great difficulty. Men had to be collected and taken to work. It will be long before the sanitary work of the City is performed with the regularity it was before the riots. The Inspectors behaved admirably under all difficulties, and performed their duties bravely. Inspectors Glover, Hallums, Powell and Ringrow slept each night in the stables. In F Ward a number of people were taken into our stables and protected by Inspector Dawes until the evening of the 12th August, and in other of our stables people sought protection. Early on the morning of the 16th August I met you, and you sanctioned the purchase of revolvers for the Inspectors.

Not only did men suffer, but animals. The bullocks of the Health Department had to be fed and cared for, and it was a most fortunate thing that hay was stored on the Flats on ground in charge of the Health Department. We sent our carts escorted by Sub-Inspectors and took as much hay as was wanted. This was no time for formalities, and you were good enough to sanction at once what had to be done. The Sub-Inspectors escorted through the streets to the Flats and back again the carts bringing hay. The following report from Inspector Glover, who rendered valuable service at all periods, will be of interest:—

"On my way to Boree Bunder Stables from the Fort at "1-20 P.M., 11th August, I heard rumours of a disturbance in the "town. I thought then that the Police could easily cope with it. "At about 2-15 P.M., when the halalkhores were being paid, a "halalkhore was brought in with his head badly cut and his clothes "covered with blood. He had been assaulted while on his way to "the stables for his pay. We then began to understand the gravity "of the disturbance. I had some difficulty in keeping the people quiet "and getting them paid. After receiving their pay, the halalkhores "collected outside the stables to ask me how they were to get to "their homes. I advised them what routes to take and had to hurry

"away to look after our scavengers of whom some (two scavenger-
"ing Muccadums, two cart-drivers and others) were reported to be
"badly hurt. Besides, I was anxious to know what had become
"of our carts, bullocks, and drivers, who were all out somewhere.

"I first found twenty-five carts whose progress through the
"town towards the Tardeo Flats had been barred. I sent them back
"to stables at once. I searched the side streets and lanes about
"Pydhowni and Bhendy Bazaar to see if the carts were blocked
"there. It appears that most of the carts had passed through before
"the people quite understood what was going on, and therefore their
"progress was not barred. How to get them back again, or even
"to get a sight of them, was the difficulty. Having looked for them
"in all the routes they usually come by and not finding any, I
"returned to stables in the hope that the carts might have come by
"some round-about route. (I mention these details because it was
"really a very anxious time.) I found a good many had got back
"as surmised, and others kept coming in until only ten were mis-
"sing. I had a note and a telephone message to say these were
"sheltered in D Ward stables.

"Early on Saturday morning I had the people waiting for orders.
"I did not let them go out, for I knew they would go away. I sent
"to Pydhowni to enquire if it would be safe to send my people
"to work in B Ward; the Commissioner answered that they
"should go to those places where there was no disturbance and
"carry on their work. Our people were so thoroughly demoralized
"by the reports coming in every few minutes that to get them
"to work was simply impossible. There was no hay for our
"bullocks that day and night (Saturday 12th). On the evening
"of that day I accompanied the Assistant Health Officer from
"Boree Bunder Stables. We arranged that I should purchase hay
"early on Sunday morning in Mody Bay, or, if necessary,
"take it, value to be paid afterwards. But early on Sunday morning
"a message came by telephone from the Health Officer instructing
"us to send to the Tardeo Flats for a supply of hay. I sent a num-
"ber of carts with a convoy of about three bigarries to each cart
"armed with stout bamboos to defend themselves, all in charge
"of Sub-Inspector Webb, who did his duties cheerfully and admira-
"bly. He was the chief support in my Ward Staff I had for three
"days and nights. The Stable Muccadum, Tookaram, did good
"service and remained at his post two days and two nights; but
"I fear that if Mr. Webb and I had not been present to support
"him, he would have been *non est*. And if we had not been there,
"it is quite impossible to say what would have happened. There
"were no night ramosees. Mr. Webb and I were the night
"ramosees. All my efforts to send a few halalkhores to work at
"bungalows, &c., failed.

"On Monday morning (14th) hay was sent for and obtained at
"Tardeo. I saw the Commissioner at Pydhowni and informed
"him, at about 6-30 A. M., that I had succeeded in sending out a

"large number of scavengers to work, but that no halalkhores were "at work. He said we must try and get them to work. The smell "in some places was most sickening. I did all I possibly could to "carry out orders and was more or less successful.

"A summary of the duties performed by me during the late "riots is as follows :—

"1. The protection, as far as lay in my power, of a very "large number of scavengering and halalkhore people, "some of whom were exposed to the full fury of the "rioters. Also protection of live-stock, bullocks and "horses ; also stables and Municipal property, all of "great value.

"2. From Sunday morning my whole efforts were devoted "towards inspiring our staff with confidence and "getting them to work again. A little was done on "Sunday, but, as a whole, work that day was a failure ; "but on Monday morning a more determined effort "and a more positive insistence on our people resuming "their regular daily work were made.

"3. Frequent attendance at Pydhowni to receive orders from "the Commissioner, the Health Officer and Assistant "Health Officer, or, indeed, from any one who might "need our help."

After the disturbances had ceased, I recommended the following officers of the Health Department for such promotion or advancement as you might think their services worthy of:

Inspectors—Glover, Hallums, Desmier, Powell, Ringrow, Dawes and DeSouza.

Sub-Inspectors—Webb, Harris, Mowforth and Kanoba Bahiroba.

Stable Muccadums—Tookaram Zilloo and Raghoo Babaji.

Ward Muccadum—Shaik Alli Ismail.

Cemetery Clerk—Banekhan Manwarkhan.

Police Ramosee Shamsoodin Bapu who had been promoted for gallant conduct.

82 deaths were registered as having been caused by violence through the riots. That other deaths were caused through distress or apprehension, there can be little doubt. This is to be expected when security and comfort and ease cease to be in a large city. Foolish rumours have been circulated as to the number of the dead. The people who believe such rumours were not where disorder and turmoil lasted in the streets. They were safe in their homes, or, in distant places. To all who were in the midst of the disorder it is known that the difficulty was not to obtain information of the dead, but to remove the dead. The people in the districts where disorder kept riot could not be persuaded to remove their dead—even the dead from natural causes. Dead bodies remained unburied for days. I will give

one rumour which I was questioned about after the riots. I was asked, if the Health Department had not removed dead bodies in carts—in refuse carts—and hidden the bodies underneath the cultivation of the Flats. It is incredible that such a foolish rumour should be believed, but foolish though the rumour was, it was believed. I need not describe the progress of events and occurrences which were under your constant observation day and night. We had the opportunity of receiving your orders or seeking your advice at all hours, and hence the performance of work was not delayed in obedience to formalities. What had to be done was promptly done, and I believe well done; and it was chiefly due to the promptness with which all measures necessary to the saving of the City from nuisances and the dangers to public health that had arisen, were taken. Only those who felt the fearful nuisances of those days can understand what effects an interruption even for one day in the sanitary work of the City may cause. The horrible stenches from dead animals and refuse polluted the atmosphere even more than the effluvia from fermenting filth and putridness.

Exclusive of still-born, 5,918 deaths were registered, being 582 less than in the preceding quarter and 752 less than in the corresponding quarter of the last year. The death-rate is equal to 28·80 per 1,000 of population calculated on the Census of 1891. The rise in mortality from 28 per 1,000 in the first week of August to 30 per 1,000 in the week preceding the period of disturbance will be observed.

Examining the statistics according to place of birth, we find that 3,418 persons, including still-born, were born in Bombay, that 2,886 were born out of Bombay, and that the place of birth of 89 persons could not be ascertained.

The Fever mortality is 788 less than in the last quarter and 575 less than in the corresponding period of the last year, and 441 less than the average of the preceding five years. Of the total deaths from fevers, 1,025 were referred to remittent fever, being 645 less than in the last quarter and 467 less than in the corresponding period of the last year; 191 were ascribed to simple continued fever, being 123 less than in the last quarter and 64 less than in the corresponding three months of the past year; 56 were ascribed to ague, being 25 less than in the last quarter and 44 less than in the corresponding quarter of the past year; and 9 were referred to enteric fever. In all 1,281 deaths were referred to fevers.

The mortality from Small-pox is 89 less than in the last quarter, but 11 more than in the corresponding quarter of the last year.

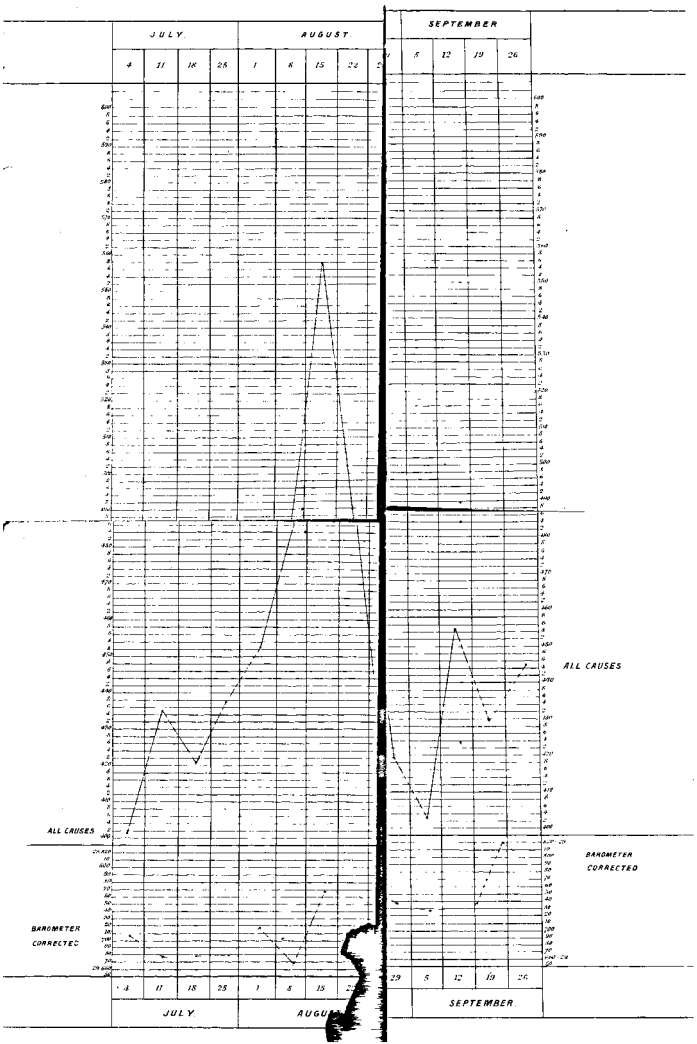
From Measles 41 deaths were registered, being 103 less than in the last quarter and 14 less than in the corresponding months of the past year.

The mortality from Cholera is 21 more than in the last quarter, but 9 less than in the corresponding quarter of the last year. There were 196 cases, of which 77 proved fatal.

List showing the number of deaths due to the Bombay Riots registered in the Health Office.

No.	Date of Death.	Section.	Street or Water.	Name.	Sex. Male.	Sex. Female.	Age. Years.	Race, Caste or Religion.	Occupation.	Cause of Death.	Inquest held.	Injuries on body.
	1893											
1	Aug. 12	Khetwadi	... Chunabhatty ...	... Gulbatsha Sherbatman	1	...	35	Pathan	... Dock Labourer	... Gunshot wound of the right thigh.	Yes.	
2	" 12	Do.	... 4th Khetwadi ...	... Dhondi Jiwaji ...	1	...	40	Nhavi	... Barber ...	... Fracture of the skull from blows of sticks.	...	No.
3	" 12	Mahalakshmi	... Breach Candy Road	... Rama Wittoo ...	1	...	40	Maratha	... Malee ...	... Do. do.	Yes.	
4	" 12	Do.	... Mahalakshmi ...	... Hoosein	1	...	40	Musselman	... Mendicant ...	... Do. do.	"	
5	" 11	Kamathipura	... Kamathipura 7th Street	... Dewaya Laxuman ...	1	...	40	Kamathi	... Tailor ...	... Do. do.	"	
6	" 12	Byculla	... Byculla	... Babaji	1	...	30	Maratha	... Gardener ...	... Compound fracture of the skull.	"	
7	" 11	Unknown	... Unknown	... Unknown	1	...	25	Musselman	... Unknown ...	... Fracture of the skull from blows of sticks.	"	
8	" 13	Do.	... Do.	... Do.	1	...	25	Do.	... Do. ...	... Gunshot wound.	"	
9	" 12	Do.	... Do.	... Do.	1	...	30	Do.	... Do. ...	... Fracture of the skull from blows of sticks.	"	
10	" 12	Do.	... Do.	... Do.	1	...	25	Do.	... Do. ...	... Do. do.	"	
11	" 13	Do.	... Do.	... Do.	1	...	40	Do.	... Do. ...	... Do. do.	"	
12	" 12	Do.	... Do.	... Do.	1	...	40	Do.	... Do. ...	... Do. do.	"	
13	" 12	Do.	... Do.	... Do.	1	...	25	Do.	... Do. ...	... Fracture of the skull and extensive scalp wound.	"	
14	" 13	Do.	... Do.	... Do.	1	...	30	Pathan	... Do. ...	... Haemorrhage from gunshot wound.	"	
15	" 12	Do.	... Do.	... Do.	1	...	23	Musselman	... Do. ...	... Fracture of the skull from blows of sticks.	"	
16	" 12	Do.	... Do.	... Do.	1	...	26	Do.	... Do. ...	... Do. do.	"	
17	" 13	Khara Talao	... Doctor Street ...	... Salcomiya Fakoomiya	1	...	40	Do.	... Servant ...	... Gunshot wound.	"	
18	" 13	Unknown	... Unknown	... Unknown	1	...	40	Do.	... Unknown ...	... Fracture of the skull,	"	
19	" 14	2nd Nagpada	... Nagpada	... Mota Kooma ...	1	...	20	Marwady	... Cook ...	... Penetrating wound of the chest and lung.	"	
20	" 12	Oomarkhari	... Bhisty Molla ...	... Chand Malcok ...	1	...	50	Musselman	... Servant ...	... Fracture of the skull from blows of sticks.	"	
21	" 12	Do.	... Bengalpura Jail Road	... Raghoo Abaji ...	1	...	25	Maratha	... Labourer ...	... Stab in the abdomen by a knife.	"	
22	" 13	Do.	... Bhendy Bazaar ...	... Warbea Waseer ...	1	...	30	Musselman	... Cart driver ...	... Penetrating bayonet wound of abdomen.	"	
23	" 14	Do.	... Do. ...	... Ramchandra Vithoba	1	...	32	Hindu	... Labourer ...	... Fracture of the skull and rupture of lung.	"	
24	" 13	Do.	... Khadack	... Mesgra Abdoola ...	1	...	18	Musselman	... Domestic Servant	... Fracture of the skull.	"	
25	" 13	Dongri	... Dongri	... Hoosein Hamabux ...	1	...	22	Do.	... Unknown ...	... Gunshot wound of right buttock.	"	
26	" 12	Mazagon	... Mount Road ...	... Bawassb Bhawa ...	1	...	40	Do.	... Sawyer ...	... Fracture of the skull from blows of sticks.	"	
27	" 13	Do.	... Ghodupdeo ...	... Babaji Sutan ...	1	...	25	Do.	... Mill Hand ...	... Do. and rupture of lungs.	"	
28	" 14	Do.	... Narel Wady, Mount Road	... Abdool Aziz Aboolkadar	1	...	16	Do.	... Mill Labourer ...	... Fracture of the skull from blows of sticks.	"	
29	" 13	Do.	... Mount Road ...	... Mial Hakim ...	1	...	30	Do.	... Cook ...	... Do. do.	"	
30	" 12	2nd Nagpada	... Sk. Boodan Kamoodan St.	... Ibrasmaly Admmab ...	1	...	60	Do.	... Customs Peon ...	... Gunshot wound.	...	No.
31	" 12	Do.	... Do.	... Rahimoodin Shaik Ismail ...	1	...	22	Do.	... Coalman on Steamer	... Do.	...	"
32	" 12	Do.	... Oondria Street ...	... Abdoolhff Fakrmahomed...	1	...	21	Do.	... Student ...	... Do.	...	"
33	" 12	Do.	... Do. ...	... Abdoolrahiman Sharfudin ...	1	...	15	Do.	... Boiler-maker ...	... Do.	...	"
34	" 12	Do.	... Temker Street ...	... Issak Rajep ...	1	...	25	Do.	... Fireman on Steamer	... Do.	...	"
35	" 12	Do.	... Hoosria Street ...	... Miya Karam Ally... ...	1	...	27	Do.	... Do. do.	... Do.	...	"
36	" 13	Do.	... Tank Street ...	... Ramjan Ismail ...	1	...	60	Do.	... Weaver ...	... Penetrating wound,	...	"
37	" 13	Do.	... New Canipura ...	... Mathekhan Pirkhan ...	1	...	40	Pathan	... Fireman on Steamer	... Do.	...	"
38	" 13	Do.	... Khadria Street ...	... Shaik Rasan Shaik Walli ...	1	...	60	Musselman	... Stone Cutter ...	... Do.	...	"
39	" 13	Kamathipura	... Kamathipura 5th Street	... Khanmahomed Niwaz ...	1	...	40	Do.	... Mucendum in Mill	... Injuries not stated.	...	"
40	" 12	Byculla	... Haines Road ...	... Nowkan	1	...	40	Do.	... Mill Labourer ...	... Fracture of the skull from blows of sticks.	Yes.	
41	" 12	Do.	... Agreepada... ...	... Rama Ganoo ...	1	...	40	Hindu	... Labourer ...	... Fracture of the base of the skull.	"	
42	" 15	Parel	... Arthur Road ...	... Rama Arjoon ...	1	...	22	Maratha	... Mill Labourer ...	... Wounds of the chest and stomach.	"	
43	" 14	Do.	... Do. ...	... Bhiwa Baji ...	1	...	47	Do.	... Plumber ...	... Haemorrhage from bayonet wound.	"	
44	" 13	Do.	... Curry Road ...	... Jahangir Gosman ...	1	...	40	Musselman	... Dyer's Servant ...	... Fracture of the skull from blows of sticks.	"	
45	" 13	Do.	... Do. ...	... Cheda	1	...	35	Do.	... Do. ...	... Do. do.	"	
46	" 13	Do.	... Do. ...	... Sakeena	...	1	30	Memon	... Dyer ...	... Do. do.	"	
47	" 12	Do.	... Unknown ...	... Raghoo Yeswant ...	1	...	22	Hindu	... Mill Hand ...	... Fracture of the base of the skull.	"	
48	" 12	Unknown	... Do. ...	... Unknown ...	1	...	65	Do.	... Barber ...	... Fracture of the skull.	"	
49	" 12	Do.	... Do. ...	... Do. ...	1	...	24	Do.	... Unknown ...	... Hemorrhage from a cut throat.	"	
50	" 11	Do.	... Do. ...	... Do. ...	1	...	22	Do.	... Do. ...	... Fracture of the skull.	"	
51	" 13	Do.	... Do. ...	... Do. ...	1	...	55	Do.	... Do. ...	... Do.	"	
52	" 12	Do.	... Do. ...	... Do. ...	1	...	20	Do.	... Do. ...	... Do. from blows of sticks.	"	
53	" 11	Do.	... Do. ...	... Do. ...	1	...	30	Do.	... Do. ...	... Fracture of the base of the skull.	"	
54	" 13	Do.	... Do. ...	... Do. ...	1	...	30	Do.	... Do. ...	... Fracture of the skull from blows of sticks.	"	
55	" 13	Do.	... Do. ...	... Do. ...	1	...	22	Do.	... Do. ...	... Do. do.	"	
56	" 13	Do.	... Do. ...	... Do. ...	1	...	40	Do.	... Do. ...	... Do. do.	"	
57	" 13	Do.	... Do. ...	... Do. ...	1	...	24	Do.	... Do. ...	... Do. do.	"	
58	" 12	Do.	... Do. ...	... Do. ...	1	...	40	Do.	... Do. ...	... Compound fracture of the skull.	...	No.
59	" 11	Do.	... Do. ...	... Do. ...	1	...	37	Do.	... Do. ...	... Fracture of the skull.	Yes.	
60	" 11	Do.	... Do. ...	... Do. ...	1	...	30	Do.	... Do. ...	... Compound comminuted fracture of the skull.	"	
61	" 12	Do.	... Do. ...	... Do. ...	1	...	17	Do.	... Do. ...	... Fracture of the skull and scalp wound.	"	
62	" 13	Do.	... Do. ...	... Do. ...	1	...	28	Musselman	... Do. ...	... Do. from blows of sticks.	"	
63	" 13	Do.	... Do. ...	... Do. ...	1	...	26	Do.	... Do. ...	... Fracture of the skull.	"	
64	" 12	Do.	... Do. ...	... Do. ...	1	...	38	Do.	... Do. ...	... Do.	"	
65	" 12	Do.	... Do. ...	... Jaman Khoodabux ...	1	...	24	Do.	... Do. ...	... Bayonet wound of the right thigh.	"	
66	" 16	Khara Talao	... Guzer Street ...	... Hassan Khan ...	1	...	40	Do.	... Fireman ...	... Wound of the chest from a lance.	"	
67	" 16	Tardeo	... Grant Road ...	... Radha	...	1	25	Purdeshi Coonbi	... Pan Shop-keeper	... Gunshot wound on the hand and neck.	"	
68	" 15	Worli	... Jacob Circle ...	... Ibrahim Samath ...	1	...	26	Musselman	... Barber ...	... Fracture of the base of the skull.	"	
69	" 15	Tardeo	... Grant Road ...	... Yazeer Cadur ...	1	...	60	Do.	... Cook ...	... Gunshot wound of the left thigh.	"	
70	" 17	1st Nagpada	... Peerkhan Lane ...	... Ismail Bowsaab ...	1	...	21	Do.	... Fitter ...	... Do. do.	"	
71	" 18	Maxagon	... Maxagon Road ...	... Rama Khandeorao...	1	...	70	Maratha	... Groom ...	... Internal injuries caused by stones and sticks.	"	
72	" 19	Oomarkhari	... Old Nagpada ...	... Jagdar Budrinath ...	1	...	30	Purdeshi Brahmin.	... G. I. P. Ry. Police	... Tetanus—T. (wound of scalp by blows from sticks)	"	
73	" 20	Bhuleshwar	... Cowasji Patel T. Road	... Govind Kesoo ...	1	...	45	Maratha	... Mules ...	... Tetanus—T. (wound of head by blows from sticks)	"	
74	" 22	Parel	... Chinchpoogly ...	... Kasia Laxuman ...	1	...	25	Do.	... Mill Labourer ...	... Do. do. do.	"	
75	" 23	Kamathipura	... Kamathipura 11th Street	... Bhoona Ramaya ...	1	...	30	Kamathi	... Labourer ...	... Tetanus—T. (scalp wound).	"	
76	" 28	Tardeo	... Grant Road ...	... Esoo Rama ...	1	...	25	Hindu Teli	... Reeld's Driver	... Gunshot wound of the right thigh.	"	
77	" 28	Lower Colaba	... Lower Colaba ...	... Syed Meera Syed Ahmed ...	1	...	36	Musulman	... Police Sepoy No. A 120	... Do. do.	"	
78	" 27	Kumbharwada	... Bhungy Molla ...	... Dadoo Vithal ...	1	...	25	Bhungy	... Municipal Halalcor ...	... Tetanus—T. (wound of hand by blows from sticks)	"	
79	" 26	Tarwardi	... Nesbit Road ...	... Govind Ratnoo ...	1	...	40	Maratha	... Labourer in G. I. P. Ry Workshops.	... Tetanus—T. (wound of head do.	"	
80	" 26	Unknown	... Unknown	... Ibrahim Ramjan ...	1	...	7	Musulman	... Mendicant ...	... Tetanus—T. (do. do.)	"	
81	" 28	2nd Nagpada	... Bellasis Road ...	... Mordekhy Moses ...	1	...	27	Jew	... Dealer in Turkish Caps	... Penetrating bayonet wound of abdomen.	"	
82	Sept. 14	Khara Talao	... Guzer Street ...	... Vishram Janoo ...	1	...	45	Maratha	... Labourer ...	... Gunshot wound of the lower jaw.	"	

T. S. WEIR,
Health Officer.


JULY
AUGUST
SEPTEMBER
4
11
18
25
1
8
15
22
29
5
12
19
26
ALL CAUSES
BAROMETER CORRECTED
JULY
AUGUST
SEPTEMBER

The deaths from Diseases of the Respiratory System were 83 less than in the last quarter, but 11 more than in the corresponding period of the last year; 1,087 deaths were registered under the head of Diseases of the Respiratory System. Of these, 651 were ascribed to Bronchitis, being 10 less than in the last quarter and 39 less than in the corresponding quarter of the last year, and 287 were referred to Pneumonia, being 10 more than in the last quarter and 58 more than in the corresponding quarter of the past year.

From diseases of the Digestive System 686 deaths were registered, being 161 more than in the last quarter, but 61 less than in the corresponding period of the last year. To Diarrhœa 382 deaths were referred, being 105 more than in the last quarter. To Dysentery 144 deaths were due, being 49 more than in the last quarter, but 75 less than in the corresponding quarter of the last year. To all other diseases of the Digestive System 160 deaths were referred, being 7 more than in the last quarter and 14 more than in the corresponding period of the past year.

From affections of the Nervous System 588 deaths were registered, being 123 more than in the last quarter, but 44 less than in the corresponding quarter of the last year.

There were 22 deaths from Puerperal Fever against 37 in the corresponding period of the last year.

No death from Hydrophobia was registered.

The mortality from Phthisis is 80 more than in the last quarter, but 117 less than in the corresponding period of the past year.

To diseases of the Circulatory System 38 deaths were referred, being 29 less than in the last quarter but 1 more than in the corresponding quarter of the last year.

From diseases of the Generative System 68 deaths were registered, being 31 more than in the last quarter but 14 less than in the corresponding months of the past year.

There were 9 deaths registered under the head of Leprosy.

To the general affection—Dropsy—36 deaths were ascribed, being 17 more than in the last quarter, but 5 less than in the corresponding period of the past year.

16 deaths were registered under the head of Diseases of the Urinary System, being 3 more than in the last quarter, but 3 less than in the corresponding months of the past year.

From Diseases of the Organs of Locomotion and Cellular Tissue 22 deaths were registered, being 10 more than in the last quarter and 6 more than in the corresponding period of the last year.

To Diseases of the Cutaneous System 8 deaths were referred, being 2 more than in the last quarter, but 3 less than in the corresponding months of the past year.

7 Premature births were registered.

The deaths from old age and debility were 36 more than in the last quarter and 1 less than in the corresponding period of the past year; 666 were registered.

The deaths from accidents and violence amounted to 167, being 74 more than in the last quarter and 70 more than in the corresponding months of the past year. 10 deaths were ascribed to poisoning, being 3 less than in the last quarter and 3 less than in the corresponding quarter of the past year; of the deaths from poisoning, 8 were suicidal and 2 accidental. The deaths from drowning were 13 more than in the last quarter, 13 being suicidal, 14 accidental, and in 6 instances the circumstances under which death took place were not known.

The rate of mortality amongst the chief races living in the City is shown in the table following :—

	Annual rate per 1,000 of population.
Hindus	24·99
Hindus, low-caste	49·06
Mussulman	37·96
Parsees	22·67
Europeans	21·96

The Infant mortality is 365 less than in the last quarter and 237 less than in the corresponding period of the last year; 2,563 children under 4 years of age died.

	No. of deaths.	Annual rate per 1,000.
Under 1 year	1,822	288·16
„ 2 years	485	143·67
„ 3 „	179	50·62
„ 4 „	77	23·81

At the burying and burning grounds of the City, 4,144 bodies were buried, 1,952 burnt, and 297 conveyed to the Towers of Silence.

3,789 living—1,955 male and 1,834 female—and 475 still-born births were registered, being 47 more than in the last quarter, but 117 less than in the corresponding quarter of the past year. The proportion of males to females by the last Census was as 170·60 to 100; but assuming that there were 100 males to 100 females, the birth-rate would be equal to 31·45.

T. S. WEIR,
Health Officer.

APPENDICES.

RETURN SHOWING THE NUMBER OF DEATHS AND THE ANNUAL RATE OF MORTALITY DURING THE THIRD QUARTERS OF 1892 AND 1893.

Ward.	Section.	Number of Deaths, exclusive of Still-born, in 1892.	Annual Rate of Mortality per 1,000 of population.	Number of Deaths, exclusive of Still-born, in 1893.	Annual Rate of Mortality per 1,000 of population.
A	Upper Colaba	40	36·90	21	19·37
	Middle and Lower Colaba	82	24·07	64	18·79
	Fort, Southern	14	14·17	4	4·04
	„ Northern	294	35·80	221	26·91
	Esplanade	38	15·10	55	21·86
B	Mandvi	333	35·71	371	39·79
	Chukla	294	36·52	299	37·14
	Oomarkhari	529	40·33	443	33·77
	Dongri	223	29·42	181	23·88
C	Market	282	25·20	265	23·68
	Dhobi Talao	303	30·34	325	32·54
	Fanasvadi	123	20·44	111	19·27
	Bhuleshwar	291	30·34	254	26·48
	Khara Talao	275	40·68	242	35·80
	Kumbharwada	284	35·26	268	33·28
D	Khetwadi	199	27·62	184	25·54
	Girgaum	233	34·51	234	34·66
	Chaupati	66	22·93	42	13·72
	Walkeshwar	59	18·16	56	17·24
	Mahalakshmi	71	16·69	58	13·63
E	Mazagaon	301	35·79	222	26·39
	Tarwadi	137	25·73	105	19·72
	2nd Nagpada	191	40·70	215	45·62
	Kamathipura	297	40·68	265	36·29
	Tardeo	209	44·04	180	37·93
	Byculla	390	32·90	337	28·43
	1st Nagpada	97	34·85	85	30·53
F	Parel	417	58·03	263	36·60
	Sewri	71	46·84	25	16·49
	Sion	133	27·14	85	17·85
G	Mahim	144	31·12	154	33·28
	Worli	120	18·86	94	14·67
Water Division		7	1·26	15	2·70
Non-resident and unknown		123	.....	175	.....
	Total...	6,670	32·46	5,918	28·80

RETURN OF BIRTHS AND DEATHS FOR THE THIRD QUARTER OF 1893.

MONTHS.	Births.	Deaths.										Barometer.	Temperature of Air.	Dew-point.	Humidity of Air.	Total fall of Rain at Colaba.
		Small-pox.	Measles.	Cholera.	Fevers.	Digestive System.			All other Causes.	All Causes, except Still-born.	Annual Rate of Mortality per 1,000 of Population.					
						Diarrhœa.	Dysentery.	All other Diseases under Digestive System.								
July	1,307	12	21	11	409	130	38	62	1,195	1,878	27·42	29·689	81·0	75·8	0·84	16·14
August	1,152	12	9	31	454	151	56	57	1,405	2,175	31·76	·730	80·3	75·1	0·84	13·55
September	1,330	6	11	35	418	101	50	41	1,203	1,865	27·23	·775	80·3	74·4	0·82	7·54
Total...	3,789	30	41	77	1,281	382	144	160	3,803	5,918	28·80	29·731	80·2	75·1	0·83	37·23
Corresponding Quarter...	3,906	19	55	86	1,856	382	219	146	3,907	6,670	32·46	29·780	80·1	75·7	0·86	79·15

RETURN showing the Number of Children successfully and unsuccessfully vaccinated, the Number whose Vaccination has been postponed, and the Number certified to be insusceptible of Successful Vaccination during the Third Quarter of 1893.

Quarter.	Number of Children successfully vaccinated.			Number of Children unsuccessfully vaccinated.	Number of Children whose Vaccination has been postponed.	Number of Children certified to be insusceptible of successful Vaccination.	Remarks.
	Under 1 year.	Under 14 years.	Total.				
3rd Quarter of 1893 ...	1,954	270	2,224	24*	38	*Nil.*	* The unsuccessful result refers to primary "operations only."

Health Officer's Report for the Fourth Quarter of 1893.

EXCLUSIVE of still-born, 5,214 deaths were registered during the weeks of the quarter ending the 19th of December 1893, being 704 less than in the last quarter and 683 less than in the corresponding period of the past year. The death-rate is equal to 25·37 per 1,000 of population, calculated on the Census of 1891.

Examining the statistics according to place of birth, we find that 3,011 persons, including still-born, were born in Bombay, that 2,578 were born out of Bombay, and that the place of 62 persons could not be ascertained.

The fever mortality is 88 less than in the last quarter, 320 less than in the corresponding period of the last year, and 395 less than the average of the preceding 5 years. Of the total deaths from fevers, 966 were referred to Remittent Fever, being 59 less than in the last quarter and 286 less than in the corresponding quarter of the past year; 172 were ascribed to Simple Continued Fever, being 19 less than in the last quarter and 12 less than in the corresponding period of the last year; 54 were ascribed to Ague, being 2 less than in the last quarter and 19 less than in the corresponding three months of the past year; 1 was referred to Enteric Fever. In all, 1,193 deaths were ascribed to Fevers.

The mortality from Small-pox is 18 less than in the last quarter, but 11 more than in the corresponding quarter of the last year. 12 deaths were registered.

From Measles 27 deaths were registered, being 14 less than in the last quarter but 15 more than in the corresponding period of the past year.

The mortality from Cholera is 59 less than in the last quarter and 22 less than in the corresponding quarter of the past year. There were 29 cases, of which 18 proved fatal.

The deaths from diseases of the Respiratory System were 67 less than in the last quarter and 124 less than in the corresponding quarter of the last year. 1,020 deaths were registered under the head of diseases of the Respiratory System. Of these, 616 were ascribed to Bronchitis, being 35 less than in the previous quarter and 101 less than in the corresponding quarter of the past year. 247 were referred to Pneumonia, being 40 less than in the last quarter and 15 less than in the corresponding quarter of the last year.

From diseases of the Digestive System, 479 deaths were registered, being 207 less than in the last quarter and 96 less than in the

corresponding quarter of the last year. Of the deaths from diseases of the Digestive System, 235 were referred to Diarrhœa, being 147 less than in the last quarter and 43 less than in the corresponding quarter of the past year. To Dysentery 108 were due, being 36 less than in the last quarter and 51 less than in the corresponding period of the last year. To all other diseases of the Digestive System 136 deaths were referred, being 24 less than in the last quarter and 2 less than in the corresponding period of the last year.

The mortality from Phthisis is 22 less than in the last quarter and 100 less than in the corresponding period of the last year.

From diseases of the Nervous System 616 deaths were registered, being 28 more than in the last quarter and 32 more than in the corresponding period of the past year.

One death from Hydrophobia was reported.

There were 24 deaths from Puerperal Fever.

From diseases of the Generative System 67 deaths were registered, being one less than in the last quarter and 18 less than in the corresponding period of the past year.

To diseases of the Circulatory System 41 deaths were referred, being 3 more than in the last quarter and 4 more than in the corresponding period of the last year.

22 deaths were registered under the head of Leprosy, being 13 more than in the last quarter and 6 more than in the corresponding quarter of the past year.

To the general affection—Dropsy—43 deaths were ascribed, being 7 more than in the previous quarter and 12 more than in the corresponding period of the past year.

16 deaths were registered under the head of diseases of the Urinary System, being 3 less than in the corresponding period of the last year.

From diseases of the Organs of Locomotion and Cellular Tissue 20 deaths were registered, being 2 less than in the previous quarter and one less than in the corresponding period of the past year.

To diseases of the Cutaneous System, 5 deaths were due.

The number of premature births is 2 less than in the last quarter and 3 less than in the corresponding period of the past year.

The deaths from Old Age and Debility were 153 less than in the past quarter and 59 less than in the corresponding period of the past year. 513 were registered.

The deaths from Accidents and Violence amounted to 80, being 87 less than in the last quarter and 20 less than in the corresponding period of the past year. Of these deaths, three (3) were the result of the Riots. 10 deaths were ascribed to poisoning, being 8 less than in the corresponding period of the past year. Of the deaths from poisoning, 6 were suicidal and 4 accidental. The deaths from drowning were 13 less than in the last quarter and 4 less than in the corresponding period of the past year; 9 were suicidal, 1 homicidal, 6 accidental, and in 4 instances the circumstances under which death took place were not known.

APPENDICES.

The rate of mortality amongst the chief races living in the City is shown below :—

	Annual rate per 1,000 of population.
Hindus	22·33
Hindus, low-caste	38·34
Mussulman	34·71
Parsees	19·97
Europeans	15·23

The infant mortality is 585 less than in the last quarter and 199 less than in the corresponding quarter of the past year; 1,978 children under 4 years of age died.

	No. of deaths.	Annual rate per 1,000.
Under 1 year	1,452	229·64
„ 2 years	299	88·57
„ 3 „	154	43·55
„ 4 „	73	22·57

At the burying and burning grounds of the City, 3,561 bodies were buried, 1,844 burnt, and 246 conveyed to the Tower of Silence.

4,200 living—2,152 male and 2,048 female—and 437 still-born births were registered, being 411 more than in the last quarter but 75 less than in the corresponding period of the past year. The proportion of males to females by the last Census was as 170·60 to 100; but assuming that there were 100 males to 100 females, the birth-rate would be equal to 34·87.

T. S. WEIR,
Health Officer.

BOMBAY MUNICIPALITY.

RETURN SHOWING THE NUMBER OF DEATHS AND THE ANNUAL RATE OF MORTALITY DURING THE FOURTH QUARTERS OF 1892 AND 1893.

Ward.	Section.	Number of Deaths, exclusive of Still-born, in 1892.	Annual Rate of Mortality per 1,000 of population.	Number of Deaths, exclusive of Still-born, in 1893.	Annual Rate of Mortality per 1,000 of population.
A	Upper Colaba	30	27·68	26	23·99
	Middle and Lower Colaba	80	23·49	55	16·15
	Fort, Southern	9	9·11	.....	.....
	„ Northern	214	26·06	189	23·01
	Esplanade	38	15·10	50	19·87
B	Mandvi	281	30·13	354	37·96
	Chukla	315	39·13	263	32·67
	Oomarkhari	507	38·65	410	31·25
	Dongri	195	25·72	160	21·63
C	Market	276	24·66	226	20·20
	Dhobi Talao	279	27·93	272	27·23
	Fanasvadi	122	20·27	114	18·94
	Bhuleshwar	304	31·69	237	24·71
	Khara Talao	265	39·20	225	33·29
	Kumbharwada	257	31·91	228	28·31
D	Khetwadi	165	22·90	132	18·32
	Girgaum	197	29·18	181	26·81
	Chaupati	54	18·76	45	15·63
	Walkeshwar	48	14·78	47	14·47
	Mahalakshmi	52	12·22	43	10·10
E	Mazagon	222	26·39	175	20·80
	Tarwadi	103	19·34	82	15·40
	2nd Nagpada	173	36·87	198	42·19
	Kamathipura	283	38·76	268	36·70
	Tardeo	185	37·83	146	30·78
	Byculla	330	27·84	279	23·54
	1st Nagpada	98	35·21	74	26 58
F	Parel	269	37·43	254	35·35
	Sewri	56	36·94	22	14·51
	Sion	108	22·03	89	18·16
G	Mahim	124	26·80	134	28·96
	Worli	106	16·63	84	12·78
Water Division		13	2·34	19	3·43
Non-resident and unknown		135	.....	133	.....
	Total...	5,897	28·70	5,214	25·37

Appendix B.

STATEMENT showing details of the Storage and Consumption of Water in Vehar Lake for the year 1893-94.

Date.			Rainfall for the Week.		Rainfall up to date for the Year.		Reduced Level of the Surface of the Water in the Lake, as per Gauge readings.		Height of water (above the lowest inlet to the Tower) available for supply.					
							At the commencement of the Week.	At the end of the Week.	At the commencement of the Week.		At the end of the Week.		When Lake is full.	
			Inches.	Cents.	Inches.	Cents.	Ft. T.H.D.	Ft. T.H.D.	Feet.	Cents.	Feet.	Cents.	Ft.	Ct.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	April ...	1893	...	...	...	...	257·25	256·95	26	75	26	45	33	00
9	,, ...	,,	...	...	...	...	256·95	256·65	26	45	26	15	33	00
16	,, ...	,,	...	...	...	...	256·65	256·40	26	15	25	90	33	00
23	,, ...	,,	...	...	...	...	256·40	256·40	25	90	25	50	33	00
30	,, ...	,,	...	...	...	...	256·00	255·75	25	50	25	25	33	00
7	May ...	,,	...	...	...	...	255·75	255·45	25	25	24	95	33	00
14	,, ...	,,	...	...	...	...	255·45	255·15	24	95	24	65	33	00
21	,, ...	,,	...	...	...	...	255·15	254·80	24	65	24	30	33	00
28	,, ...	,,	...	46	...	46	254·80	254·60	24	30	24	10	33	00
4	June ...	,,	1	44	1	90	254·60	254·55	24	10	24	05	33	00
11	,, ...	,,	...	69	2	59	254·55	254·30	24	05	23	80	33	00
18	,, ...	,,	5	43	8	02	254·30	254·60	23	80	24	10	33	00
25	,, ...	,,	14	60	22	62	254·60	256·75	24	10	26	25	33	00
2	July ...	,,	1	66	24	28	256·75	256·80	26	25	26	30	33	00
9	,, ...	,,	8	33	33	11	256·80	258·30	26	30	27	80	33	00
16	,, ...	,,	1	21	34	32	258·30	258·50	27	80	28	00	33	00
23	,, ...	,,	9	37	43	69	258·50	260·25	28	00	29	75	33	00
30	,, ...	,,	3	95	47	64	260·25	260·95	29	75	30	45	33	00
6	August ...	,,	6	53	54	17	260·95	262·25	30	45	31	75	33	00
13	,, ...	,,	10	80	64	97	262·25	263·85	31	75	33	35	33	00
20	,, ...	,,	...	85	65	82	263·85	263·65	33	35	33	15	33	00
27	,, ...	,,	1	94	67	76	263·65	263·65	33	15	33	15	33	00
3	September...	,,	6	47	74	23	263·65	263·90	33	15	33	40	33	00
10	,, ...	,,	2	05	76	28	263·90	263·80	33	40	33	30	33	00
17	,, ...	,,	2	46	78	74	263·80	263·85	33	30	33	35	33	00
24	,, ...	,,	1	25	79	99	263·85	263·65	33	35	33	15	33	00
1	October ...	,,	...	92	80	91	263·65	263·45	33	15	32	95	33	00
8	,, ...	,,	...	35	81	26	263·45	263·15	32	95	32	65	33	00
15	,, ...	,,	...	81	81	57	263·15	262·90	32	65	32	40	33	00
22	,, ...	,,	...	...	81	57	262·90	262·50	32	40	32	00	33	00
29	,, ...	,,	...	...	81	57	262·50	262·15	32	00	31	65	33	00
5	November ...	,,	...	...	81	57	262·15	261·80	31	65	31	30	33	00
12	,, ...	,,	...	...	81	57	261·80	261·40	31	30	30	90	33	00
19	,, ...	,,	...	...	81	57	261·40	261·10	30	90	30	60	33	00
26	,, ...	,,	...	50	82	07	261·10	261·00	30	60	30	50	33	00
3	December ...	,,	...	...	82	07	261·00	260·70	30	50	30	20	33	00
10	,, ...	,,	...	...	82	07	260·70	260·40	30	20	29	90	33	00
17	,, ...	,,	...	...	82	07	260·40	260·10	29	90	29	60	33	00
24	,, ...	,,	...	...	82	07	260·10	259·75	29	60	29	25	33	00
31	,, ...	,,	...	...	82	07	259·75	259·45	29	25	28	95	33	00
7	January ...	1894	1	04	1	04	259·45	259·25	28	95	28	75	33	00
14	,, ...	,,	...	...	1	04	259·25	258·95	28	75	28	45	33	00
21	,, ...	,,	...	...	1	04	258·95	258·60	28	45	28	10	33	00
28	,, ...	,,	...	...	1	04	258·60	258·30	28	10	27	80	33	00
4	February ...	,,	...	...	1	04	258·30	258·05	27	80	27	55	33	00
11	,, ...	,,	...	...	1	04	258·05	257·70	27	55	27	20	33	00
*18	,, ...	,,	...	...	1	04	257·70	257·40	27	20	26	90	33	00
25	,, ...	,,	...	...	1	04	257·40	257·10	26	90	26	60	33	00
4	March ...	,,	...	...	1	04	257·10	256·80	26	60	26	30	33	00
11	,, ...	,,	...	...	1	04	256·80	256·60	26	80	26	00	33	00
†18	,, ...	,,	...	...	1	04	256·60	256·25	26	00	25	75	33	00
25	,, ...	,,	...	...	1	04	256·25	256·05	25	75	25	55	33	00

Some water flowing in from Tansa duct.

* From 18th February no water was flowing from the Tansa Duct.

† From 18th to 24th March 1894 some water was flowing in from the Tansa Duct. From 25th March no water was flowing from the Tansa Duct.

S. TOMLINSON M. Inst. C. E.,
Water Engineer.

BOMBAY MUNICIPALITY.

STATEMENT showing details of the Storage and Consumption of Water in Tulsi Lake for the year 1893-94.

Date.			Rainfall for the Week.		Rainfall up to date for the Year.		Reduced Level of the Surface of the Water in the Lake, as per Gauge readings.		Height of water (above the lowest inlet to the Tower) available for supply.					
							At the commencement of the Week.	At the end of the Week.	At the commencement of the Week.		At the end of the Week.		When Lake is full.	
			Inches.	Cents.	Inches.	Cents.	Ft. T.H.D.	Ft. T.H.D.	Feet.	Cents.	Feet.	Cents.	Ft.	Cts.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	April ...	1893	...	...	...	...	448·45	442·80	44	09	43	44	57	14
9	,, ...	,,	...	...	...	...	442.80	442·10	43	44	42	74	57	14
16	,, ...	,,	...	...	...	...	442·10	441·50	42	74	42	14	57	14
23	,, ...	,,	...	...	...	...	441·50	440·80	42	14	41	44	57	14
30	,, ...	,,	...	...	...	...	440·80	440·20	41	44	40	84	57	14
7	May ...	,,	...	...	...	...	440·20	439·55	40	84	40	19	57	14
14	,, ...	,,	...	...	...	...	439·55	438·90	40	19	39	54	57	14
21	,, ...	,,	...	...	...	...	438·90	438·25	39	54	38	89	57	14
28	,, ...	,,	...	...	...	...	438·25	437·70	38	89	38	34	57	14
4	June ...	,,	2	60	2	60	437·70	437·30	38	34	37	94	57	14
11	,, ...	,,	...	33	2	93	437·30	436·85	37	94	37	49	57	14
18	,, ...	,,	6	25	9	18	436·85	436·75	37	49	37	39	57	14
25	,, ...	,,	17	69	26	87	436·75	440·30	37	39	40	94	57	14
2	July ...	,,	1	34	28	21	440·30	440·05	40	94	40	69	57	14
9	,, ...	,,	10	24	38	45	440·05	443·45	40	69	44	09	57	14
16	,, ...	,,	1	77	40	22	443·45	443·80	44	09	44	44	57	14
23	,, ...	,,	10	86	51	08	443·80	447·75	44	44	48	39	57	14
30	,, ...	,,	4	58	55	66	447·75	448·85	48	39	49	49	57	14
6	August ...	,,	6	15	61	81	448·85	451·25	49	49	51	89	57	14
13	,, ...	,,	13	01	74	82	451·25	456·55	51	89	57	19	57	14
20	,, ...	,,	1	07	75	89	456·55	456·45	57	19	57	09	57	14
27	,, ...	,,	1	54	77	43	456·45	456·40	57	09	57	04	57	14
3	September...	,,	8	77	86	20	456·40	456·70	57	04	57	34	57	14
10	,, ...	,,	2	99	89	19	456·70	456·60	57	34	57	24	57	14
17	,, ...	,,	1	92	91	11	456·60	456·60	57	24	57	24	57	14
24	,, ...	,,	1	51	92	62	456·60	456·45	57	24	57	09	57	14
1	October ...	,,	...	83	93	45	456·45	456·20	57	09	56	84	57	14
8	,, ...	,,	...	11	93	56	456·20	455·85	56	84	56	49	57	14
15	,, ...	,,	...	...	93	56	455·85	455·35	56	49	55	99	57	14
22	,, ...	,,	...	...	93	56	455·35	454·80	55	99	55	44	57	14
29	,, ...	,,	...	...	93	56	454·80	454·20	55	44	54	84	57	14
5	November...	,,	...	...	93	56	454·20	453·55	54	84	54	19	57	14
12	,, ...	,,	...	...	93	56	453·55	453·00	54	19	53	64	57	14
19	,, ...	,,	...	...	93	56	453·00	452·55	53	64	53	19	57	14
26	,, ...	,,	...	41	93	97	452·55	452·10	53	19	52	74	57	14
3	December...	,,	...	...	93	97	452·10	451·55	52	74	52	19	57	14
10	,, ...	,,	...	...	93	97	451·55	451·05	52	19	51	69	57	14
17	,, ...	,,	...	...	93	97	451·05	450·50	51	69	51	14	57	14
24	,, ...	,,	...	...	93	97	450·50	449·95	51	14	50	59	57	14
31	,, ...	,,	...	...	93	97	449·95	449·40	50	59	50	04	57	14
7	January ...	1894	1	62	1	62	449·40	448·95	50	04	49	59	57	14
14	,, ...	,,	...	...	1	62	448·95	448·40	49	59	49	04	57	14
21	,, ...	,,	...	...	1	62	448·40	447·90	49	04	48	54	57	14
28	,, ...	,,	...	...	1	62	447·90	447·35	48	54	47	99	57	14
4	February ...	,,	...	...	1	62	447·35	446·85	47	99	47	49	57	14
11	,, ...	,,	...	...	1	62	446·85	446·25	47	49	46	89	57	14
18	,, ...	,,	...	...	1	62	446·25	445·75	46	89	46	39	57	14
25	,, ...	,,	...	...	1	62	445·75	445·15	46	39	45	79	57	14
4	March ...	,,	...	...	1	62	445·15	444·65	45	79	45	29	57	14
11	,, ...	,,	...	...	1	62	444·65	444·10	45	29	44	74	57	14
18	,, ...	,,	...	...	1	62	444·10	443·50	44	74	44	14	57	14
25	,, ...	,,	...	...	1	62	443·50	442·90	44	14	43	54	57	14

S. TOMLINSON, M. Inst. C. E.,
Water Engineer.

APPENDICES.

STATEMENT showing details of the Storage and Consumption of Water in Pawai Lake for the year 1893-94.

Date.			Rainfall for the Week.		Rainfall up to date for the Year.		Reduced Level of the Surface of the Water in the Lake, as per Gauge readings.		Height of water (above the lowest inlet to the Tower) available for supply.					
							At the commencement of the Week.	At the end of the Week.	At the commencement of the Week.		At the end of the Week.		When Lake is full.	
			Inches.	Cents.	Inches.	Cents.	Ft. T.H.D.	Ft. T.H.D.	Feet.	Cents.	Feet.	Cents.	Ft.	Ct.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	April	1893	...	...	...	...	187·85	187·65	22	85	22	65	25	00
9	,,	,,	...	...	...	...	187·65	187·35	22	65	22	35	25	00
16	,,	,,	...	...	...	...	187·35	187·00	22	35	22	00	25	00
23	,,	,,	...	...	...	...	187·00	186·65	22	00	21	65	25	00
30	,,	,,	...	...	...	...	186·65	186·35	21	65	21	35	25	00
7	May	,,	...	...	...	...	186·35	185·95	21	35	20	95	25	00
14	,,	,,	...	...	...	...	185·95	185·60	20	95	20	60	25	00
21	,,	,,	...	...	...	...	185·60	185·25	20	60	20	25	25	00
28	,,	,,	...	26	...	26	185·25	184·90	20	25	19	90	25	00
4	June	,,	3	22	3	48	184·90	184·70	19	90	19	70	25	00
11	,,	,,	1	06	4	54	184·70	184·45	19	70	19	45	25	00
18	,,	,,	7	73	12	27	184·45	184·95	19	45	19	95	25	00
25	,,	,,	23	50	35	77	184·95	190·05	19	95	25	05	25	00
2	July	,,	1	83	37	60	190·05	190·00	25	05	25	00	25	00
9	,,	,,	7	05	44	65	190·00	190·10	25	00	25	10	25	00
16	,,	,,	1	07	45	72	190·10	190·00	25	10	25	00	25	00
23	,,	,,	8	24	53	96	190·00	190·10	25	00	25	10	25	00
30	,,	,,	3	27	57	23	190·10	190·05	25	10	25	05	25	00
6	August	,,	6	00	63	23	190·05	190·10	25	05	25	10	25	00
13	,,	,,	7	78	71	01	190·10	190·00	25	10	25	00	25	00
20	,,	,,	1	29	72	30	190·00	190·00	25	00	25	00	25	00
27	,,	,,	2	09	74	39	190·00	190·00	25	00	25	00	25	00
3	September	,,	7	01	81	40	190·00	190·05	25	00	25	05	25	00
10	,,	,,	2	58	83	98	190·05	190·05	25	05	25	05	25	00
17	,,	,,	3	49	87	47	190·05	190·10	25	05	25	10	25	00
24	,,	,,	...	84	88	31	190·10	190·00	25	10	25	00	25	00
1	October	,,	...	87	88	68	190·00	190·00	25	00	25	00	25	00
8	,,	,,	...	17	88	85	190·00	190·00	25	00	25	00	25	00
15	,,	,,	...	55	89	40	190·00	189·95	25	00	24	95	25	00
22	,,	,,	...	...	89	40	189·95	189·85	24	95	24	85	25	00
29	,,	,,	...	...	89	40	189·85	189·75	24	85	24	75	25	00
5	November	,,	...	...	89	40	189·75	189·70	24	75	24	70	25	00
12	,,	,,	...	...	89	40	189·70	189·60	24	70	24	60	25	00
19	,,	,,	...	...	89	40	189·60	189·50	24	60	24	50	25	00
26	,,	,,	...	44	89	84	189·50	189·40	24	50	24	40	25	00
3	December	,,	...	...	89	84	189·40	189·35	24	40	24	35	25	00
10	,,	,,	...	...	89	84	189·35	189·25	24	35	24	25	25	00
17	,,	,,	...	...	89	84	189·25	189·15	24	25	24	15	25	00
24	,,	,,	...	...	89	84	189·15	189·05	24	15	24	05	25	00
31	,,	,,	...	...	89	84	189·05	188·95	24	05	23	95	25	00
7	January	1894	...	90	...	90	188·95	188·90	23	95	23	90	25	00
14	,,	,,	...	...	...	90	188·90	188·80	23	90	23	80	25	00
21	,,	,,	...	...	...	90	188·80	188·70	23	80	23	70	25	00
28	,,	,,	...	...	...	90	188·70	188·60	23	70	23	60	25	00
4	February	,,	...	...	...	90	188·60	188·50	23	60	23	50	25	00
11	,,	,,	...	...	...	90	188·50	188·40	23	50	23	40	25	00
18	,,	,,	...	...	...	90	188·40	188·30	23	40	23	30	25	00
25	,,	,,	...	...	...	90	188·30	188·20	23	30	23	20	25	00
4	March	,,	...	...	...	90	188·20	188·10	23	20	23	10	25	00
11	,,	,,	...	...	...	90	188·10	188·00	23	10	23	00	25	00
18	,,	,,	...	...	...	90	188·00	187·90	23	00	22	90	25	00
25	,,	,,	...	...	...	90	187·90	187·80	22	90	22	80	25	00

S. TOMLINSON, M. Inst. C. E.,
Water Engineer.

BOMBAY MUNICIPALITY.

STATEMENT showing details of the Storage and Consumption of Water in Tansa Lake for the year 1893-94.

Date.			Rainfall for the Week.		Rainfall up to date for the Year.		Reduced Level of the Surface of the Water in the Lake, as per Gauge readings.		Height of Water (above the lowest inlet to the Tower) available for supply.					
							At the commencement of the Week.	At the end of the Week.	At the commencement of the Week.		At the end of the Week.		When Lake is full.	
			Inches.	Cents.	Inches.	Cents.	Ft. T.H.D.	Ft. T.H.D.	Feet.	Cents.	Feet.	Cents.	Ft.	Ct.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	April	1893	...	...	...	...	399·14	398·82	19	14	18	82	25	00
9	"	"	...	...	...	...	398·82	398·50	18	82	18	50	25	00
16	"	"	...	...	...	...	398·50	398·18	18	50	18	18	25	00
23	"	"	...	...	...	...	398·18	397·87	18	18	17	87	25	00
30	"	"	...	...	...	...	397·87	397·56	17	87	17	56	25	00
7	May	"	...	...	...	...	397·56	397·24	17	56	17	24	25	00
14	"	"	...	...	...	...	397·24	396·93	17	24	16	93	25	00
21	"	"	...	04	...	04	396·93	396·55	16	93	16	55	25	00
28	"	"	4	75	4	79	396·55	396·43	16	55	16	43	25	00
4	June	"	1	45	6	24	396·43	396·71	16	43	16	71	25	00
11	"	"	...	59	6	83	396·71	396·44	16	71	16	44	25	00
18	"	"	12	71	19	54	396·44	396·78	16	44	16	78	25	00
25	"	"	21	68	41	22	396·78	405·29	16	78	25	29	25	00
2	July	"	2	22	43	44	405·29	405·11	25	29	25	11	25	00
9	"	"	12	21	55	65	405·11	405·51	25	11	25	51	25	00
16	"	"	2	59	58	24	405·51	405·08	25	51	25	08	25	00
23	"	"	9	73	67	97	405·08	405·15	25	08	25	15	25	00
30	"	"	2	43	70	40	405·15	405·09	25	15	25	09	25	00
6	August	"	12	27	82	67	405·09	405·55	25	09	25	55	25	00
13	"	"	9	88	92	55	405·55	405·11	25	55	25	11	25	00
20	"	"	2	20	94	75	405·11	405·00	25	11	25	00	25	00
27	"	"	3	94	98	69	405·00	405·13	25	00	25	13	25	00
3	September	"	6	17	104	86	405·13	405·21	25	13	25	21	25	00
10	"	"	2	97	107	83	405·21	405·07	25	21	25	07	25	00
17	"	"	5	48	113	31	405·07	405·41	25	07	25	41	25	00
24	"	"	1	25	114	56	405·41	404·96	25	41	24	96	25	00
1	October	"	1	15	115	71	404·96	405·00	24	96	25	00	25	00
8	"	"	...	13	115	84	405·00	404·79	25	00	24	79	25	00
15	"	"	...	39	116	23	404·79	404·67	24	79	24	67	25	00
22	"	"	...	...	116	23	404·67	404·39	24	67	24	39	25	00
29	"	"	...	...	116	23	404·39	404·12	24	39	24	12	25	00
5	November	"	...	...	116	23	404·12	403·82	24	12	23	82	25	00
12	"	"	...	...	116	23	403·82	403·52	23	82	23	52	25	00
19	"	"	...	09	116	32	403·52	403·28	23	52	23	28	25	00
26	"	"	...	...	116	32	403·28	403·01	23	28	23	01	25	00
3	December	"	...	...	116	32	403·01	402·75	23	01	22	75	25	00
10	"	"	...	...	116	32	402·75	402·42	22	75	22	42	25	00
17	"	"	...	...	116	32	402·42	402·14	22	42	22	14	25	00
24	"	"	...	...	116	32	402·14	401·86	22	14	21	86	25	00
31	"	"	...	...	116	32	401·86	401·63	21	86	21	63	25	00
7	January	1894	...	71	...	71	401·63	401·48	21	63	21	48	25	00
14	"	"	...	...	...	71	401·48	401·23	21	48	21	23	25	00
21	"	"	...	...	...	71	401·23	401·00	21	48	21	00	25	00
28	"	"	...	...	...	71	401·00	400·72	21	00	20	72	25	00
4	February	"	...	...	...	71	400·72	400·44	20	72	20	44	25	00
11	"	"	...	...	...	71	400·44	400·16	20	44	20	16	25	00
18	"	"	...	...	...	71	400·16	399·87	20	16	19	87	25	00
25	"	"	...	...	...	71	399·87	399·58	19	87	19	58	25	00
4	March	"	...	...	...	71	399·58	399·22	19	58	19	22	25	00
11	"	"	...	...	...	71	399·22	398·90	19	22	18	90	25	00
18	"	"	...	...	...	71	398·90	398·55	18	90	18	55	25	00
25	"	"	...	...	...	71	398·55	398·26	18	55	18	26	25	00

S. TOMLINSON, M. INST. C. E.,
Water Engineer.

Appendix C.

Return of Fires as required under Section 364 of the City of Bombay Municipality Act, 1888.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	REMARKS.
1893.							
19th Mar. at 11-30 P.M.	Nesbit Lane, Mazagon.	A thatched hut and contents destroyed and a goat burned to death.	Daudbhai ...	Rs. 7	Careless smoking.	Water stored on premises.	Extinguished by inmates. Not insured.
20th Mar. at 1-1 A.M.	Matunga ...	A jowli hut burned out.	M. Philips ...	„ 4	Unknown ...	Domestic supply of water used.	Extinguished by inmates. Insurance unknown.
22nd Mar. at 3-40 A.M.	Carnac Road ...	A building of one floor (about 40 × 30 ft.) and contents severely damaged by fire, heat, and water, and roof off.	Manekji Nowroji	Rs.35,500	Unknown ...	Water used from main at once.	Extinguished by Firemen with one steamer and two stand pipes. Building insured, contents not insured.
Do ...	„ ...	Roof damaged by fire and breakage; contents of shop slightly by water.	„				Do. do. Contents and building insured.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	Remarks.
1893.							
22nd Mar. at 7-5 A.M.	Piru Hill, Gowalia Tank.	Roof of ground floor chawl damaged by fire.	Durgi (woman) .	Rs. 20	Careless use of fire.	Domestic supply of water used.	Extinguished by inmates. Not insured.
26th Mar. at 12-1 A.M.	Mahim Bazar, Cross Road.	Roof of a jowli hut severely damaged by fire.	Balkrishna Damodhar.	„ 2	Unknown ...	Water used from well.	Extinguished by inmates. Insurance unknown.
27th Mar. at 8-1 A.M.	Lower Colaba ...	A quantity of loose cotton damaged by fire and water on 1st floor.	Chunda Ramji...	„ 200	Friction ...	Water used from well on premises.	Extinguished by Press employés. Insured.
29th Mar. at 3-1 P.M.	Arthur Pander..	A bale of cotton damaged by fire and water.	Jaipal Sampal...	„ 5	Spontaneous combustion.	Do. do. from sea	Extinguished by boat hands. Not insured.
3rd April at 2-30 A.M.	„	A thatched hut slightly damaged by fire.	Damodhar Shivram.	Re. 1	Spark from Locomotive.	Domestic supply of water used.	Extinguished by inmates. Not insured.
3rd April at 2-35 P.M.	Charni Road (Bombay United Spg. & Wg. Co., Ld.).	A quantity of loose cotton damaged by fire and water in blow room on ground floor.	Khatau Makanji	Rs. 100	Stone in machinery.	Water stored on premises.	Extinguished by Mill employés with hydrant. Insured.

6th April at 5-45 A.M.	DeLisle Road (Union Mill).	A quantity of loose and baled cotton damaged by fire and water in blow room on ground floor.	Vithaldas Gopaldas & Co.	Rs.	1,650	Stone in machinery.	Water stored on premises.	Extinguished by Mill employés with private hydrants. Insured.
6th April at 4-1 P.M.	DeLisle Road (B. B. & C. I. Ry. Workshops).	A tiled shed containing a quantity of oily waste and coal and a stock of Railway sleepers adjoining severely damaged by fire.	B. B. & C. I. Ry. Co.	„	6,000	Spontaneous combustion.	Water used from main, well and tank at once.	Extinguished by Firemen and Railway employés with 3 Brigade Steamers and 1 private Steamer and 2 manuals. Insurance unknown.
8th April at 1-1 P.M.	Dongri Street ...	A quantity of rags burned on first floor.	Soondarji Keshavji.	Re.	1	Careless smoking.	Domestic supply of water used.	Extinguished by inmates. Insurance unknown.
11th April at 12-1 P.M.	Ripon Road ...	Some wearing apparel damaged by fire on ground floor.	Gunpatram Dhobi.	Rs.	3	Spark from fire.	Do. ...	Do.
12th April at 12-1 A.M.	Kazi Street ...	Wood partition damaged by fire on ground floor.	Abdulali Boodabhoy.	Re.	1	Careless use of fire.	Do. ...	Do.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	REMARKS.
1893. 14th April at 3-30 A.M.	Bellasis Road Bridge.	A quantity of cow-dung cakes burned and a wooden partition damaged by fire on ground floor.	Vithaldas Pranjivandas.	Rs. 12	Careless smoking.	Water used from main at once.	Extinguished by firemen with one hydrant. Insurance unknown.
16th April at 5-1 A.M.	Duncan Road ...	Store-room on ground-floor and contents burned out; rest of building and contents damaged by fire, heat and water.	Jamnadas Manikchand.	„ 2,000	Unknown ...	Water used from main at once.	Extinguished by firemen with 2 hydrants. Building insured.
18th April at 12-2 P.M.	Frere Road ...	14 jowli huts and contents burned.	Lala Wanni and others.	„ 445	Careless smoking.	Do. ...	Extinguished by firemen with 3 hydrants. Not insured.
19th April at 6-1 P.M.	Carnac Road ...	Contents on ground-floor damaged by fire and water.	Gopinath Anandji.	„ 5	Careless use of fire.	Domestic supply of water used.	Extinguished by Police with buckets. Not insured.

19th April at 3-30 A.M.	Kolsa Street ...	A small quantity of stock damaged by fire and water on ground-floor.	Abdulali Hookabhoy.	Re. 1	Kerosine lamp.	Domestic supply of water used.	Extinguished by firemen with buckets. Insurance unknown.
25th April at 3-45 A.M.	Stable Street, Kamathipura.	A building of 2 floors about 50×30 feet used as dwelling house and store; upper floor and contents severely damaged by fire and roof off.	Abdulali Fazulbhoy.	Rs. 6,500	Spontaneous combustion.	Water used from main at once.	Extinguished by firemen with 2 steamers and 1 hydrant. Insurance unknown.
26th April at 12-20 A.M.	Lower Colaba ...	Some wearing apparel burned on third floor.	Krishnabai ...	„ 15	Careless use of kerosine lamp.	Domestic supply of water used.	Extinguished by inmates. Insurance unknown.
5th May at 4-55 A.M.	Bellasis Road ...	A corrugated iron shed (used as pattern shop) and contents nearly burned out; sheds adjoining and contents damaged by fire and heat.	G. Gahagan & Co.	„ 15,000	Unknown ...	Water used from main at once.	Extinguished by firemen with two steamers. Contents and building insured.
6th May at 10-1 P.M.	Nowroji Hill Road.	A quantity of cowdung cakes burned on second floor.	Lateefali Noordin.	Re. 1	Careless use of fire.	Do.	Extinguished by inmates. Building insured; contents not insured.

Date.	Locality.	Nature of property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, fire.	REMARKS.
1893. 7th May at 6-1 P. M.	Mandvi Street...	Flooring slightly damaged by fire on ground floor.	Vactoo Nathoo...	Re. 1	Careless smoking.	Domestic supply of water used.	Extinguished by inmates. Insurance unknown.
17th May at 2-1 P. M.	Girgam Back Road.	Roof of jawli hut slightly damaged by fire.	Hormasji Naoroji.	„ 1	Spark from chimney adjoining.	Do. ...	Do.
19th May at 6-30 A. M.	Lower Colaba ...	A quantity of loose cotton damaged by fire and water on 1st floor.	Assa Virji ...	Rs. 100	Friction ...	Water stored on premises.	Extinguished by Press employés. Insured.
19th May at 2-1 A.M.	Chinch poogly (Satya Narayan Mills).	Some waste cotton and a spinning machine damaged by fire on ground floor.	Bisindayal Hardayal.	„ 5	Unknown ...	Do. ...	Extinguished by mill employés. Insurance unknown.
23rd May at 1-1 A. M.	Jail Road ...	A building of one floor about 50×40 feet (used as store) and contents severely damaged by fire and roof off; contents in store adjoining slightly damaged by water.	Abdul Rahiman Beg Mahomed	„ 30,000	Unknown ..	Water used at once from main and tank.	Extinguished by Firemen with 2 steamers. Insurance of building unknown; contents insured.

27th May at 7-25 P. M.	Nepean Sea Road	4 rooms and roof of a ground floor building severely damaged by fire.	Bai Merbai Naserwanji Watchaghandy	Rs. 6,000	Unknown ...	Water used at once from main and well.	Extinguished by Firemen. Insured.
1st June at 10-15 A. M.	Kumbharwada, Dadar.	A small quantity of grass burned and roof of tiled shed slightly damaged by fire and breakage.	Bhawanishankar Balkrishna.	„ 40	Careless use of fire.	Domestic supply of water used.	Extinguished by Firemen and inmates with buckets. Insurance not known.
5th June at 3-30 a.m.	Lady Jamsetjee Road (The Bombay Woollen Manufacturing Co.)	A quantity of oily wool damaged by fire on ground floor of Mill.	E. Latham & Co.	„ 10	Spontaneous combustion. From enquiries made it appears	Water stored on premises.	Extinguished by Mill employés. Insured.

that at 3-30 a.m. on the 5th instant, the watchman on duty at the Mill observed smoke accumulating on the premises and discovered a quantity of oily wool alight on the ground floor of the Mill, which he extinguished by the aid of buckets of water. From all appearances, the fire originated through the wool overheating. The Mill was not working at the time of the outbreak, and no Brigade engines attended, the occurrence being reported to the Brigade by the Police after the fact.

9th June at 6-45 p.m.	Hornby Road ...	Rafters of cook-room on third floor slightly damaged by fire.	Byramji Cursetji	Rs. 5	Careless use of fire.	Domestic supply of water used.	Extinguished by inmates. Insurance unknown.
13th June at 4-1 p.m.	Tardeo Road (Jivraj Balloo Spinning and Weaving Mill.)	A quantity of loose cotton damaged by fire and water in blow-room on ground floor.	Jivraj Balloo ...	Rs. 200	Friction ...	Water stored on premises.	Extinguished by Mill sprinklers. Contents and building insured.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	REMARKS.
1893.							
19th June at 10-55 P.M.	Frere Bunder ...	A number of large stacks of hay destroyed and severely damaged by fire. (Fire still burning.)	Cashiba Chappa and others.	Rs. 75,000	Doubtful ...	At once from main and well.	Extinguished by Firemen with 4 steamers (2 hydrants still at work). Not insured.
24th June at 2-1 A.M.	Kamathipura 3rd Lane.	Kerosine lamp destroyed and wooden partition damaged by fire in shop on ground floor.	Gulam Ali ...	,, 2	Kerosine lamp upset.	Domestic supply.	Extinguished by inmates. Not insured.
26th June at 8-30 A.M.	Mahim Bazar Road.	Roof of jowli hut severely damaged by fire.	Sorabji Nusserwanji.	,, 15	Careless smoking.	From well ...	Do.
26th June at 4-1 P.M.	Chowpatti ...	A small quantity of hay burned and roof of stable slightly damaged by fire.	Arjoon Roga ...	,, 2	Do. ...	Do. ...	Do.
29th June at 4-30 P.M.	Ginger Street, Mandvi.	Some wearing apparel burned on top floor.	Gunga (woman)	,, 2	Spark from fire.	Domestic supply.	Do.

16th July...	Chinch Bunder Road.	A kerosine lamp destroyed on ground floor.	H. H. Aga Khan.	Re. 1...	Kerosine lamp exploding.	None used ...	Extinguished by inmates. Not insured.
28th July...	Kolsa Street ...	A quantity of straw damaged on ground floor.	Rungildas Heerji	„ 1...	Careless use of lamp.	At once from main.	Extinguished by firemen with hydrant. Insurance unknown.
Do. ...	Chinch Bunder Road.	A quantity of straw damaged by fire on ground floor.	Kurimali Soorji.	„ 1...	Unknown ...	Domestic supply.	Extinguished by inmates. Insurance unknown.
5th Aug. ...	Sheik Memon Street, Cloth Market.	A number of old books and papers damaged by fire in loft; contents in three shops under, severely damaged by water.	Moolji Jetha ...	Rs. 5,000...	Light thrown down.	At once from main.	Extinguished by firemen with one hydrant and private manual. Building not insured; contents insured.
11th Aug. at 4-20 P.M.	Agripada Lane...	A small quantity of grass and weather-frames of buffalo stables burned. Building slightly damaged by fire and heat.	Bombay Municipality.	„ 100...	Incendiarism.	At once from main.	Extinguished by firemen with two hydrants.

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Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	REMARKS.
1893. 12th Aug. at 12-3 P.M.	Mangal Wadi, Girgaum.	Three ground floor building (used as mosques) and contents damaged by fire, heat and breakage.	Mahomedan Burial-ground.	Rs. 500...	Incendiarism..	From main and well at once.	Extinguished by firemen and police with hydrant and buckets.
13th Sept. at 12-4 P.M.	Arthur Road, Tardeo.	A thatched shed about 100 × 15 feet (used as stable) nearly burnt out and 6 buffaloes burnt to death and 1 severely burnt.	Harry Prasad Matadin.	„ 500...	Careless use of fire.	From pond at once.	Extinguished by firemen with 1 steamer. Not insured.
28th Sept., 9-30 P.M.	Sewri (China Mill).	A window frame slightly damaged by fire on ground floor.	P. A. Hormarji & Co.	Re. 1...	Careless smoking.	.....	Extinguished by employés with buckets and water stored on premises.
3rd Oct. at 11-30 P.M.	Old Nagpada ...	Kerosine lamp destroyed and some bedding damaged by fire on 4th floor.	Haji Hassum ...	Rs. 4...	Kerosine lamp exploding.	Domestic supply.	Extinguished by inmates. Insurance unknown.

6th Oct. at 10-25 A.M.	Ripon Road ...	A quantity of loose cotton damaged by fire and water in blow room on ground floor of Indian Manufacturing Company's Mill.	Damodar Thakersey Moolji & Co.	Rs.	200...	Light thrown down.	Water stored on premises.	Extinguished by employés with mill hydrants. Insured.
6th Oct. at 12-1 P.M.	Kambeker Street	A small quantity of coir rope and some bamboos damaged by fire on 5th floor.	Haji Jusub ...	„	2...	Spark from fire.	Do. ...	Extinguished by inmates with buckets. Insurance unknown.
11th Oct. at 7-30 A.M.	Jhanjikar Street.	Some wearing apparel damaged by fire on 1st floor.	Gopal Pragji ...	„	3...	Children playing with matches.	Water stored on premises.	Extinguished by inmates with buckets. Building insured; contents not insured.
14th Oct. at 4-1 A.M.	Warden Road ...	A phaeton damaged by fire and water in stable.	Vurjivandas Madhowdas.	„	400...	Light thrown down.	Domestic supply.	Extinguished by inmates. Insurance unknown.
19th Oct. at 10-5 P.M.	324, Girgam Road.	Contents of shop on ground floor damaged by fire, heat and water.	Ghool Hoosein, Esmailji and others.	„	1,000...	Unknown ...	From service pipe.	Extinguished by firemen with buckets. Not insured.

Date.	Locality.	Nature of Property destroyed.	Name of owner.	Estimated damage.	Clause of fire.	Time at which the water was turned on to, and supplied at, Fire.	REMARKS.
1893.							
23rd Oct. at 6-4 A.M.	Ripon Road (Indian Manufacturing Co.).	A small quantity of cotton damaged by fire and water in godown on ground floor.	Damodar Thakersi Moolji & Co.	Rs. 25...	Unknown ...	Water stored on premises.	Extinguished by employés with hydrant. Insured.
24th Oct. at 12-1 A.M.	150, Kamathipura 8th Lane.	Some wearing apparel slightly damaged by fire on ground floor.	Luxumon Kamathi.	„ 4...	Do. ...	Do. ...	Extinguished by inmates. Not insured.
27th Oct. at 1-30 A.M.	123, Kamathipura Bazar Road.	A quantity of tobacco damaged by fire and water in shop on ground floor.	Gopal Ebji ...	„ 100...	Do. ...	Do. ...	Do.
27th Oct. at 2-1 A.M.	DeLisle Road (Union Mill).	A quantity of cotton slightly damaged by fire and severely by water in mixing room on third floor.	Vithaldas Gopaldas & Co.	„ 10,000...	Do. ...	Do. ...	Extinguished by mill sprinklers. Insured.
27th Oct. at 10-1 P.M.	254, Borah Bazar Street.	A bed and bedding damaged by fire on first floor.	Framji Pestonji.	„ 30...	Careless use of oil lamp.	Do. ...	Extinguished by inmates. Not insured.

28th Oct. at 11-59 A.M.	Parel Road, Byculla.	Roof of stable slightly damaged by fire.	Babaji Sonoo ...	Re.	1...	Light thrown down.	Water stored on premises.	Extinguished by inmates. Not insured.
31st Oct. at 10-20 A.M.	13, Carpenter Street, Mazagon.	A small quantity of firewood burned and roof of chawl slightly damaged by fire.	Bhikoo Kusha ...	Rs.	5...	Careless use of matches.	From main at once.	Extinguished by firemen with hydrant. Not insured.
31st Oct. at 4-30 P.M.	Victoria Dock ...	6 bales of cotton and 14 bales of jute slightly damaged by fire and water on upper deck of S.S. "Marquis Bacquehem."	Austrian Lloyd's S. N. Co. (O. Von Hoffer, Agent).	,,	100...	Careless smoking.	Do. ...	Extinguished by dock employés with private hydrant. Insured.
3rd Nov. at 11-50 A.M.	No. 30, Kamathipura 8th Lane.	A small quantity of stock damaged by fire and water in shop.	Nursoo Lingoo...	Re.	1...	Light thrown down.	Domestic supply.	Extinguished by inmates. Not insured.
4th Nov. at 2-1 P.M.	DeLisle Road ...	A jowli hut slightly damaged by fire.	Sumput Augandas.	Rs.	2...	Do. ...	Do. ...	Do.
5th Nov. at 1-30 P.M.	WalpakadyRoad, Mazagon.	A cadjan shed 35 ×10 feet and contents severely damaged by fire and water.	Gunny Tyeb ...	,,	500...	Unknown ...	At once from main.	Extinguished by firemen with one hydrant. Not insured.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	Remarks.
1893.							
5th Nov. at 3-20 P.M.	677, Girgam Road.	A building of two floors about 50×40 feet (used as workshop, show-rooms and stable) and contents nearly burned out and partly fallen down. Buildings adjoining slightly damaged by heat; 3 horses burned to death and four injured.	Freitas & Co. ...	Rs. 18,000..	Spark from forge.	At once from main.	Extinguished by firemen with 3 steamers and one hydrant. Not insured.
5th Nov. at 3-45 P.M.	Dadar Road ...	A building of one floor about 40×20 feet (used as hosiery store) and contents severely damaged by fire and roof off.	Damji Lalji ...	„ 40,000...	Unknown ...	From main at once.	Extinguished by firemen with one hydrant. Insured.
8th Nov. at 1-1 A.M.	181, Ripon Road, Madanpura.	Flooring and joisting on second floor slightly damaged by fire.	Dawood Gulam Hoosein.	Re. 1...	Defect in fireplace.	Domestic supply.	Extinguished by inmates. Not insured.

8th Nov. at 10-9 P.M.	Abdul Rahman Street.	A small quantity of stock damaged by fire and water in shop on ground floor.	Jan Mahomed Gulam Husein.	Rs.	25...	Light thrown down.	Domesti c supply	Extinguished by inmates. Not insured.
9th Nov. at 2-30 P.M.	Bazaar R o a d, Kamathipura.	Some bamboo matting damaged by fire on ground-floor.	Katean Jan ...	Re.	1...	Careless smoking.	Do. ...	Do.
10th Nov. at 10-55 A.M.	Wari Bunder ...	A jowli hut and contents slightly damaged by fire.	Dhondiba ...	,,	1...	Careless use of fire.	Water stored on premises.	Do.
11th Nov. at 8-10 P.M.	Babula Tank Rd.	A tiled shed (used as stable) about 40 × 20 feet and contents nearly burned out and several bullock carts damaged by fire in yard adjoining.	Jan A b d u l a Abdul Husein Abba Kazi.	Rs.	630...	Careless smoking.	From main at once.	Extinguished by firemen with one steamer. Insurance unknown.
11th Nov. at 10-5 P.M.	Hornby Road ...	Wood framing and cloth ceiling of tent slightly damaged by fire.	A. Simons ...	,,	3...	Overheat o f h a n g i n g lamp.	Do. ...	Extinguished by inmates. Not insured.
21st Nov. at 3-30 P.M.	Carnac Bridge Road.	A canvas awning burned on ground floor.	Khoda Daseeria...	Re.	1...	Light thrown down.	Water stored on premises.	Do.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, and supplied at, Fire.	Remarks.
1893.							
26th Nov. at 8-30 P.M.	Mahim Bazar Road.	Some gunny bags damaged by fire on ground floor.	Khesa Banji ...	Re. 1...	Careless smoking.	Water stored on premises.	Extinguished by inmates. Not insured.
27th Nov. at 2-40 P.M.	Babula Tank Road.	A small quantity of grass burned on roof of stable	Adamji Peerbhoy & Co.	„ 1...	Light thrown down.	Do. ...	Do.
28th Nov. at 4-15 A.M.	DeLisle Road (the Queen Mill).	A quantity of cotton damaged by fire and water in godown.	K. M. Heeramaneck & Co.	Rs. 500...	Unknown ...	Do. ...	Extinguished by mill employés with private hydrant. Insured.
5th Dec. at 9-1 A.M.	Carpenter Street, Mazagon.	A quantity of wood shavings burned on second floor.	Ramjee Macorra	Re. 1...	Spark from fire.	Domestic supply	Extinguished by inmates. Not insured.
8th Dec. at 5-30 A.M.	DeLisle Road (Hope Mill).	A quantity of cotton damaged by fire and water in mixing room on first floor.	Messrs. Rungdass Gocundas & Co.	Rs. 2,000...	Unknown ...	Water stored on premises.	Extinguished by mill employés with private hydrant. Insured.
8th Dec. at 4-1 P.M.	Dadur Road ...	A deal-box burned on ground floor.	Hanuman Laloo.	Re. 1...	Careless smoking.	Domestic supply	Extinguished by inmates. Not insured.

12th Dec. at 3-15 P.M.	Bellasis Road ...	A door mat and about 1 ft. × 1 ft. of flooring damaged by fire on first floor.	Messrs. Kemp & Co.	Re. 1...	Careless smoking.	Water stored on premises.	Extinguished by inmates. Insured.
14th Dec. at 9-5 P.M.	Dongri Street ...	Some gunny bags and a quantity of grain damaged by fire on ground floor.	Canji Monsee ...	Rs. 50...	Light thrown down.	Do. ...	Extinguished by inmates. Building insured; contents not insured.
20th Dec. at 12-1 P.M.	DeLisle Road (Hope Mill).	A quantity of loose cotton damaged by fire and water in mixing room on first floor.	Messrs. Rangildas Bhukhandas & Co.	„ 12,500...	Unknown ...	From mill tank and main at once.	Extinguished by Mill employés and firemen with private hydrants. Insured.
21st Dec. at 7-44 P.M.	Chuckla ...	A small quantity of stock damaged by fire on ground floor.	Adreman Arbi...	„ 30...	Light thrown down.	Water stored on premises.	Extinguished by inmates and firemen with hand-pump. Not insured.
23rd Dec. at 7-15 A.M.	Cabul Street, Paidhoni.	A kerosine lamp destroyed and flooring slightly damaged by fire on second floor.	Haji Saji Sabhoy	Re. 1...	Kerosine lamp upset.	Do. ...	Extinguished by inmates. Not insured.
24th Dec. at 7-1 A.M.	Badhin Gully ...	Some wearing apparel slightly damaged by fire on second floor.	Dia Ambaji ...	Rs. 5...	Careless smoking.	Do. ...	Do.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water, if used from mains, was turned on to, and supplied at, Fire.	Remarks.
1893. 28th Dec. at 5-10 P.M.	Supari Baug, Parel Road.	A jowli hut and contents nearly burned out.	Mahomedbhoy Rahimtula.	Rs. 200...	Light thrown down.	From service pipe.	Extinguished by inmates and firemen with buckets. Not insured.
28th Dec. at 8-13 P.M.	Abdul Raman Street.	A small quantity of cotton waste and some gunny bags damaged by fire in shop on ground floor.	Syabji Habibbhoy.	„ 20...	Do. ...	Do. ...	Extinguished by inmates. Not insured.
1894. 1st Jan. at 6-27 P.M.	Hornby Road ...	A kerosine lamp destroyed on open ground.	Mr. A. Simmons.	„ 10...	Kerosine lamp exploding.	Do. ...	Extinguished by firemen with buckets. Not insured.
2nd Jan. at 5-30 A.M.	Duncan Road ...	A quantity of sugar burned in shop on ground floor.	Kalka Gunga ...	„ 4...	Sugar boiling over.	Do. ...	Extinguished by inmates. Not insured.
8th Jan. at 11-11 a.m.	Dongri Street, Oomercarry.	A shed used as stable and contents severely damaged by fire.	Bai Mahomed Memon.	„ 30...	Light thrown down.	From main at once.	Extinguished by Firemen with hydrant. Not insured.

10th Jan. at 3-30 p.m.	Fergusson Road (Britannia Mill).	A quantity of cotton slightly damaged by fire and severely by water in blow-room on ground floor.	Khatau Makanji & Co.	,, 6,000	Stone in Machinery.	Water stored on premises.	Extinguished by Mill sprinklers. Insured.
11th Jan. at 5-30 p.m.	Chinch Bunder Road.	A number of corrugated iron sheds (used as stables and grain stores) and contents burned out and fallen down. About 32 tiled sheds containing timber and a large quantity of timber on open ground nearly destroyed.	Narayan Kasiba and 32 others.	Rs. 2,50,000	Light thrown down.	At once from main; good supply.	Extinguished by Firemen with 5 steamers and 1 hydrant. Partly insured.
.....	.....	About 40 feet of wood fencing burnt.	G. I. P. Railway.	.....	.....	.....	Extinguished by Firemen with 5 steamers and 1 hydrant. Insurance unknown.
13th Jan. at 6-1 A.M.	232, Cazi Street, Paidhoni.	Some wearing apparel slightly damaged by fire on first floor.	Kaikhoshroo Cowasji.	Re. 1...	Kerosine lamp upset.	From service pipe.	Extinguished by inmates. Insured.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water, if used from mains, was turned on to, and supplied at, Fire.	REMARKS.
14th Jan. at 3-1 A.M.	366, Jinjikar Street, Dongree	Flooring slightly damaged by fire on ground floor.	Dhurmi, woman.	Re. 1...	Spark from fire.	From service pipe.	Extinguished by inmates. Not insured.
17th Jan. at 8-30 P.M.	Carnac Road ...	A building of one floor (about 120×30 feet) and contents (belonging to Messrs. Lopes & Co. and 6 others) burned out and roof off.	Haji Mahomed Abba.		Unknown ...	At once from main.	Extinguished by Firemen with 5 steamers. Building insured; contents partly insured.
Do. ...	Do. ...	Roof slightly damaged by fire and contents of shop (Messrs. Bhimji Jivan & Co.) underneath by water and removal.	Do. ...		Do. ...	Do. ...	Extinguished by Firemen with 5 steamers. Building and contents insured.
Do. ...	No. 6, First Carnac Road Cross Lane.	Side front of building severely damaged by fire and heat.	Vinayek Shunkerji.		Do. ...	Do. ...	Do. Not insured.

Do. ...	No. 12,	Lohar Chawl.	Back front of building severely damaged by fire and heat.	Ramchandra Trimbuck.	Rs. 1,48,600	Do. ...	Do. ...	Do. do.
Do. ...	No. 13	do. ...	Do. do. ...	Narayen Lakhmidass.		Do. ...	Do. ...	Do. do.
Do. ...	No. 14	do. ...	A building of three floors, upper floor burned out and roof of rest of ditto and contents damaged by fire, heat and water.	Ramchandra Babaji.		Do. ...	Do. ...	Do do.
Do. ...	No. 15	do. ...	Do. do. ...	Mahadoo C. Tooklee.		Do. ...	Do. ...	Do. Contents and building insured.
Do. ...	No. 16	do. ...	Back front of building damaged by fire and heat.	Gulab Ramji ...		Do. ...	Do. ...	Do. do.
17th Jan. at 10-15 P.M.	Chinch	Bunder Road.	2 tiled sheds and contents damaged by fire and water.	Gani Tyeb ...	Rs. 150...	Careless use of kerosine lamp.	Do. ...	Extinguished by firemen with 1 hydrant. Insurance unknown.

Date.	Locality.	Nature of property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water, if used from mains, was turned on to, and supplied at, Fire.	Remarks.
1894.							
20th Jan. at 10-30 P.M.	Middle Colaba...	A number of unpressed bales of cotton damaged by fire and water on ground floor.	Ramji Ludha ...	Rs. 700...	Unknown ...	Water stored on premises.	Extinguished by press employés and firemen with private hydrant. Insured.
21st Jan. at 4-15 P.M.	No. 10, Bhuleshwar Road.	Some cloth damaged by fire on second floor.	Gangadas Jamnadas.	Re. 1...	Careless smoking.	From service pipe.	Extinguished by inmates. Insurance unknown.
27th Jan. at 12-40 A.M.	Balaram Street...	A quantity of loose hay burned on open ground.	Krustna Aba and others.	Rs. 125...	Light thrown down.	At once from main.	Extinguished by firemen with 1 steamer and 3 hydrants. Not insured.
31st Jan. at 1-1 P.M.	Colaba	A quantity of loose cotton damaged by fire and water on 1st floor; contents underneath by water.	Chanda Ramji...	„ 2,000...	Stone in machinery.	Do. ...	Extinguished by employés and firemen with private hydrant and Cotton Association steamer. Insured.

1st Feb. at 9-15 A.M.	Elphin stone Road, Parel.	About 2′ × 3′ of wood partition damaged by fire on ground floor.	Waghoo Ghatti..	Rs.	5...	Careless use of fire.	Water stored on premises.	Extinguished by inmates. Not insured.
2nd Feb. at 7-1 P.M.	Chuna Bhathi...	A small quantity of hay burned on open ground.	Ardesir Cursetji.	Re.	1...	Light thrown down.	Do. ...	Do. by owner. Not insured.
5th Feb. at 12-45 P.M.	Cavel Street, Kalbadevi Road.	Upper floor and contents damaged by fire and water and part of roof off.	Narayanji Jivanji.	Rs.	250...	Light thrown down.	At once from main.	Extinguished by firemen with one hydrant. Insured.
6th Feb. at 9-1 P.M.	41, Frere Road.	Contents on 1st floor slightly damaged by fire.	M. H. Shimtob..	„	3...	Kerosine lamp upset.	From service pipe.	Extinguished by inmates. Not insured.
7th Feb. at 10-20 A.M.	Fanaswadi ...	A tiled shed used as stable and contents damaged by fire and heat.	Saraswati, woman.	„	25...	Light thrown down.	At once from main.	Extinguished by firemen with one hydrant Not insured.
8th Feb. at 12-10 P.M.	Pinjari Gully, Abdul Rahman Street.	Front room on second floor and contents damaged by fire and water.	Rehman Rusel...	„	75...	Children playing with matches.	Water stored on premises.	Extinguished by inmates with buckets. Not insured.
9th Feb. at 10-1 A.M.	Kamathipura 2nd Lane.	Wooden partition on 1st floor damaged by fire.	Lingu Makaji...	„	10...	Careless use of fire.	Do. ...	Do
11th Feb. at 7-1 P.M.	Middle Pakhadi, Worli.	A jowli hut and contents destroyed.	Sonoo Dhackoo..	„	21...	Careless use of kerosine lamp.	Water from well.	Do.

Date.	Locality.	Nature of Property destroyed.	Name of owner.	Estimated damage.	Cause of Fire.	Time at which the Water, if used from main, was turned on to, and supplied at, Fire.	REMARKS.
11th Feb. at 9-1 P.M.	Abdul Rahman Street.	A door damaged by fire in shop on ground floor.	Mussar Mapalar..	Re. 1...	Careless use of fire.	Water stored on premises.	Extinguished by inmates with buckets. Not insured.
13th Feb. at 12-30 A.M.	Thomas Street, Lower Colaba.	Some loose cotton and 18 bales of unpressed cotton damaged by fire and water on open ground.	Nathubhai Shivchand.	Rs. 1,500...	Careless smoking.	From main at once.	Extinguished by firemen with one hydrant. Insured.
13th Feb. at 1-40 P.M.	Gunpowder Road, Mazagon (Framji Petit Mill).	A large quantity of loose cotton slightly damaged by fire and severely by water in mixing room on ground floor.	Messrs. D. M. Petit & Sons.	„ 6,000...	Unknown ...	From main at once and tank on premises.	Extinguished by firemen with 1 steamer and 1 hydrant and mill employés with 2 private steamers and hydrants. Insured.
13th Feb. at 5-1 P.M.	Balaram Street...	A quantity of hay damaged by fire and water on open ground.	Husun Suleman and others.	„ 50...	Light thrown down.	From main at once.	Extinguished by firemen with 1 hydrant. Not insured.

15th Feb. at 2-18 P. M.	Tardeo Road ...	Some hay burnt and roof of jowli hut damaged by fire.	Wadia & Sons...	„	3	Careless smoking.	From service pipe.	Extinguished by inmates. Insured.
16th Feb. at 10-10 A.M.	No. 5, Jamli Street, Mandvi.	Some wearing apparel burnt and paint work scorched on 2nd floor.	Bhagoji Bhawanji.	„	4	Careless use of oil lamp.	Water stored on premises.	Extinguished by inmates. Not insured.
16th Feb. at 11-55 A.M.	Lower Colaba (Bombay Cotton Press.)	A quantity of loose cotton damaged by fire and water on 1st floor.	Madan Bhimji...	„	800	Stone in machinery.	From service pipe.	Extinguished by press employés with private appliances. Insured.
21st February at 4-20 P.M.	Lower Colaba (Bombay Cotton Press).	A quantity of loose cotton damaged by fire & water on 1st floor, contents underneath by water.	Jaipal Saijpal ...	„	5,000...	Stone in machinery.	Water stored on premises.	Extinguished by Press employés with 4 private hydrants and firemen with hand pump and buckets. Insured.
2nd March at 12-55 A.M.	Thana Street, Wari Bunder.	A quantity of bran damaged by fire & water on open ground.	Shamji Ludha...	„	40...	Spontaneous combustion. The Chief Officer, Fire Brigade, reports : That on the arrival of the brigade at the scene of the fire, smoke was observed issuing from a number of bags of bran which were stacked very closely together on the open ground. A considerable quantity of the bran had to be removed before the fire, which had apparently occurred almost in the centre of the stack, could be extinguished. The outbreak in his opinion was due to the bran being stacked in a damp condition and stored for a lengthy period.	At once from main.	Extinguished by firemen with 1 hydrant. Not insured.

Date.	Locality.	Nature of Property destroyed.	Name of Owner.	Estimated Damage.	Cause of Fire.	Time at which the water was turned on to, if used from mains, and supplied at Fire.	Remarks.
5th March at 10-1 P.M.	No. 219, Kalbadevi Road.	About 2×2 ft. of flooring damaged by fire in loft on 2nd floor.	Premji Jivan ...	Rs. 5...	Oil lamp.	Water stored on premises.	Extinguished by inmates. Insured.
6th March at 1-45 A.M.	Purbhadevi Road Worli.	A jowli hut and contents damaged by fire and water.	Baboo Luxmon..	„ 225...	Careless use of kerosine lamp	From well.	Extinguished by firemen with one manual. Not insured.
8th March at 6-15 P.M.	Lower Colaba (Bombay Cotton Press).	A quantity of loose cotton damaged by fire and water on 1st floor.	Jaipal Sajpal ...	„ 500...	Stone in machinery.	Water stored on premises.	Extinguished by Press employés. Insured.
12th March at 3-58 P.M.	Ghorupdeo Road (Alexandra Mill).	A quantity of rubbish burnt in blow room tunnel.	Messrs. E. D. Sassoon & Co.	Nil. ...	Friction of machinery.	Water stored on premises.	Extinguished by Mill employés with private hydrants. Insured.
17th March at 5-45 P.M.	Lower Colaba (Old Nicol Mill).	A quantity of bamboos and a quantity of bamboo matting and jowli roofing burnt.	Ahmedbhoy Habibbhoy & Co.	Rs. 200...	Unknown ...	From main at once.	Extinguished by firemen with two steamers and Cotton Association steamer. Not insured.

Appendix D.

PROGRESS REPORTS,

1893,

OF NEW WORKS.

BOMBAY MUNICIPALITY.

PROGRESS REPORTS UP TO THE END OF MARCH 1893

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS.				
WORKS IN PROGRESS.				
1. Repairs to Bhundarwada Reservoir ...	65,500+ 5,408-1-3	Cur. rev.	23rd Jan. 1890 18th Aug. 1892	1st March 1890 18th Aug. 1892
2. Repairs, Tulsi main Embankments.....	22,000 13,000	Do. ...	14th Jan. 1892. 27th Jan. 1892.	14th Jan. 1892 1st Mar. 1892
	35,000			
3. Connections at Chinchpokli between Tansa and Vehar mains.	7,164	Loan	16th June 1892...	16th June 1892...
WORKS TO BE COMMENCED.				
4. Covering storage basin at the Bhundarwada Reservoir and constructing filter over it.	44,500 1,15,500	Do. ...	14th Jan. 1892 6th Feb. 1893	14th Jan. 1892 1st Mar. 1893
	1,60,000			
5. Renewals of existing mains	1,00,000	Cur. rev....	30th Jan. 1893 ...	1st March 1893.
6. Filling up and metalling the new ground at Chinchpokli junction of DeLisle and Clerk Roads.	2,882	Do.	2nd Feb. 1893 ...	Do. ...
7. Further alteration and improvements at the Malabar Hill Reservoir.	75,000	Loan	6th Feb. 1893 ...	Do. ...
8. Extension of water mains in various places.	30,000	Do.	Do. ...	Do. ...
9. Road from Vehar to Tulsi with a light Tramway to carry pipes.	25,000	Do.	Do. ...	Do. ...
10. New distribution mains	16,00,000	Do.	Do. ..	Do. ...
11. Excavating and widening the old Khosta Nalla at mile 2.	325	Do.	23rd Feb. 1893 ...	23rd Feb. 1893...
12. Raising manholes in No. 3 Division ...	61	Do.	Do. ...	Do. ...
13. Earth filling and loose stone pitching in No. 4 Division.	305	Do.	Do. ...	Do. ...
14. Repairing 2 feet drain on Siphon No. 2, &c.	260	Do.	Do. ...	Do. ...
15. Dry rubble pitching on Siphon No. 5 ...	4,600	Do.	Do. ...	Do. ...
16. Filling up to pipe embankment level a strip of land taken up for the pipe line at Coorla to store pipes.	2,640	Do.	Do. ...	Do. ...
17. Masonry required at Ghatkopar clearing sluice.	2,500	Do.	Do. ...	Do. ...

APPENDICES TO RECORD.

OF NEW WORKS NOW IN COURSE OF CONSTRUCTION.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1893.	Remarks.
		Rs. a. p.	
Mar. 1891 ...	31st Mar. 1893 ...	68,267 0 0	Grant for completion of work applied for, No.W7002, dated 20th March 1893.
11th Mar. 1892 ...	31st Jan. 1894 ...	15,633 0 0	Work in progress by contract.
July 1892 ...	31st Aug. 1893 ...	4,217 0 0	Work in progress. Some special castings required.
Not commenced yet.	31st May 1895 ...	.....	Appointment of staff for preparation of contract drawings applied for.
Do. ...	31st May 1894 ...	.....	List of places being prepared; tender for pipes received.
Do. ...	31st July 1893 ...	.....	Tenders invited.
Do. ...	30th Sept. 1893...	.....	Reports prepared on further works required.
Do. ...	31st May 1894 ..	.....	Tenders for pipes invited.
Do. ...	18 months from date of instructions to proceed	.....	No instructions to proceed.
.....	3 years do.	.....	Under consideration by a Sub-Committee of Corporation.
Not commenced yet.	30th June 1893 ...	.....	Application to undertake work departmentally applied for.
Do. ..	Do. ...	.....	Do.
Do. ...	Do. ...	.....	Do.
Do. ...	Do. ...	.....	Do.
Do. ...	31st March 1894.	.....	Details under consideration.
Do. ...	30th Nov. 1893...	.....	Contract drawings under preparation.
Do. ...	31st March 1894 .	.....	Details under consideration.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS—(*contd.*)				
WORKS TO BE COMMENCED—(contd.)				
18. Work at basis of cabins, say 16 @ 110...	1,760	Loan	23rd Feb. 1893 ...	23rd Feb. 1893 ...
19. Renewing boundary marks	2,000	Do.	Do. ...	Do. ...
20. Allowances for fixing gratings at siphon heads and tails.	250	Do.	Do. ...	Do. ...
21. Ghatkopar strainers	12,000	Do.	Do. ...	Do. ...
22. Flooring Bassein bridge and culverts ...	13,000	Do.	Do. ...	Do.
23. Additional work, Ghatkopar bridge.....	1,600	Do.	Do. ...	Do. ...
24. Widening embankments at Bassein Creek.	10,000	Do.	Do. ...	Do. ...
25. Memorial structure at Tansa	2,000	Do.	Do. ...	Do. ...
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS.				
WORKS COMPLETED.				
26. Queen's Road and Girgaum sewerage and house connection works.	11,14,929	Cur. rev..	28th July 1887 ...	28th July 1887 ...
27. Six-chamber latrine and six-chamber urinals in Gilder Street at the junction of Falkland Road and Gilder Street.	4,180	Do. ...	9th Feb. 1891 ...	1st Mar. 1891 ...
28. Four-chamber urinal at the corner of Khoja Street and Grant Road.	480	Do. ...	23rd Jan. 1890 ...	1st Mar. 1890 ...
29. Construction of a storm-water drain in Hornby Road from the Salvation Army Hall to Bazar Gate Street.	21,598	Loan ...	6th Apr. 1892 ...	6th Apr. 1892...
WORKS IN PROGRESS.				
30. House connections without privy fittings in the first sections of Drainage Scheme.	(*a*) 5,78,611-14-4	Loan	8th Dec. 1881 ...	5th May 1885 ...
31. Automatic flushers at heads of gullies..	5,570	Do. ...	Do. ...	.....

(*a*) House connections without privy fittings ... ...
Add—Transferred from Argyll Road, Standing Committee's Resolution No. 5192,

Less—Amount transferred to meet excess on Pumping Engines, Town Council's

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1893.	Remarks.
		Rs. a. p.	
Not commenced yet.	31st March 1894..	.....	Details under consideration.
Do. ...	Do. ...	.....	Number required being ascertained.
Do. ...	30th June 1893 ...	.....	Work to be undertaken departmentally.
Do. ...	31st March 1894...	.....	Contract drawings being prepared.
Do. ...	3rd March 1894 .	.....	Contract papers being prepared.
Do. ...	30th June 1893...	.....	Tenders of Messrs. Richardson & Cruddas accepted for iron work.
Do. ...	31st May 1894 ...	.....	Detailed drawings to be prepared.
Do. ...	Do. ...	.....	Drawings under preparation.
Nov. 1888...	1st Feb. 1891...	8,87,915 0 0	Work entrusted to Messrs. Bulkley & Co. and completed on 12th May 1891. Final accounts with them are adjusted. Some portion is being carried out departmentally.
2nd Jan. 1892...	29th Feb. 1892...	8,719 8 0	Work completed by petty works contractors. Accounts adjusted. Some slight works recently suggested by the Health Officer are being executed.
.....	.....	881 15 4	Work completed by petty works contractors. Accounts adjusted.
5th July 1892 ...	24th Nov. 1892 ...	11,899 0 0	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work has been completed on the 25th March 1893. Final accounts are to be adjusted.
8th Jan. 1887 / 25th Jan. 1892	31st July 1888 / 31st July 1893	2,33,885 8 4	Khetwadi section of the work is done; other portions in progress.
Do.	Do.	.....	Work ordered to be proceeded with departmentally, but stopped pending decision of Corporation as regards house-connections in general.

... ...	Rs. 5,71,165 0 0
dated 20th June 1888	„ 19,046 14 4
	Rs. 5,90,211 14 4
Resolution No. 52, dated 13th January 1882...	„ —11,600 0 0
	Rs. 5,78,611 14 4

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS IN PROGRESS—(*contd.*)				
32. New latrines and urinals	(a) 41,984-13-0	Cur. rev...	16th Oct. 1889 ...	16th Oct. 1889 ...
33. Diverting pipe sewers along the site of the proposed overbridge at Falkland Road to allow the construction of the bridge.	10,338	Do.	28th Aug. 1890...	28th Aug. 1890 ...
34. House connections in Agripada District.	2,48,642	Loan	8th Oct. 1888 ...	1st July 1890 ...
35. Arrangements for flushing Parel and Bellasis Road storm-water drain from Babula Tank and Nagpada Tank.	*4,295-10-1	Cur. rev...	23rd Jan. 1890 ...	1st Mar. 1890 ...
36. Construction of sewer flushing arrangements.	14,000	Loan	Do. ...	Do. ...
37. Closing up with cast-iron the perforations in manhole covers.	4,000	Cur. rev..	9th Feb. 1891 ...	1st Mar. 1891 ...
38. Construction of pipe sewers in Parel Village Main Road and Government House Road, Parel.	77,603	Loan	14th Jan. 1892 ...	14th Jan. 1892 ...
39. Constructing pipe sewers and metal vent shafts in Parel village.	20,852	Do. ...	25th Feb. 1892 ...	25th Feb. 1892...

(*a*) Renewed grant ... ...
Add—Grant budgetted for 1892-93 ... ...
Additional grant sanctioned for the latrine to be erected in the Kennedy Sea Face

* Budget grant ... ...
Add—Transferred from Item 12, Detailed Statement No. 12, Budget Estimate for 1892-93.

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1893.	Remarks.
		Rs. a. p.	
6th Dec. 1889 ...	.....	13,914 6 4	Contract for latrines and urinals in Erskine Road, Picket Road and Mazagon Road and Jackaria Musjid Street given to Messrs. Mistri & Bhedwar and the work of construction of latrines and urinals at Moombadevi Road is stopped as per Commissioner's recent orders. Tender of Mr. Sorabjee Jamsetjee for the construction of latrines and urinals in Kennedy Sea Face Gardens has been accepted.
1st Nov. 1890 ...	.....	5,428 3 2	The work is being executed departmentally, but now stopped pending acquisition of land.
20th Oct. 1890 ...	15th Oct. 1892 ...	2,22,464 0 0	The whole of the contract work was completed before 30th September 1892, except connections to two houses and five vent shafts. House connection work is stopped in accordance with Corporation Resolution No. 3142, dated 30th June 1892.
21st Apr. 1891 ...	.....	3,167 14 1	The work at Babula Tank is completed. The work at Nagpada Tank has now been ordered to be entrusted to petty works contractors.
20th Sept. 1891...	31st Mar. 1894...	9,284 9 2	Work is being executed departmentally, and is stopped for the present as the height of sewage in the sewers does not allow it to be carried out.
1st Oct. 1891 ...	31st Dec. 1893 ...	1,969 15 5	Work entrusted to Messrs. Richardson & Cruddas and is in progress; the probable time of completion cannot be fixed.
26th Apr. 1892 ...	22nd Jan. 1893 ...	14,863 11 6	Work completed. Account not adjusted.
5th July 1892 ...	31st July 1893...	5,142 0 0	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work is now in progress. The contract time was up on the 18th February 1893.

... ...	Rs.	25,422 18 0
... ...	„	12,000 0 0
Gardens	„	4,562 0 0
Total	Rs.	41,984 13 0
... ...	Rs.	3,844 0 0
... ...	„	451 10 1
Total	Rs.	4,295 10 1

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)	Rs.			
WORKS IN PROGRESS—(*contd.*)				
40. Experimental Drainage Works	10,000	Sur. cash balance.	8th Sept. 1892...	8th Sept. 1892...
41. Construction of engine and boiler-house at Love Grove. Foundation of engines above 78·50 T. H. D. and the foundations of boilers; erection of machinery	4,40,000	Loan	8th Sept. 1892...	8th Sept. 1892...
WORKS TO BE COMMENCED.				
42. Filling and pitching slope of portion of Haines Road forming boundary of the storm-water reservoir.	4,888	Cur. rev....	16th Jan. 1889 ...	16th Jan. 1889 ...
43. Arching over main drain at Arthur Road Crossing.	18,000	Loan ...	14th Jan. 1892 ...	14th Jan. 1892 ...
44. Vent shafts on Ripon Road sewer ...	3,047	Cur. rev....	Budget for 1892-93.	1st Mar. 1892 ...
III.—ROADS, BUILDINGS, &c.				
WORKS COMPLETED.				
45. Chawl of 17 rooms at Love Grove ...	9,367	Cur. rev...	9th Feb. 1891 ...	1st Mar. 1891 ...
46. Covering with corrugated iron roofing part of the passage between Bori Bunder stables and workshops as a shelter for hearses and vans.	1,632	Do. ...	Budget for 1892-93.	1st Mar. 1892 ...
47. Night-soil depôt near the junction of DeLisle and Parbhadevi Roads.	26,394	Do. ...	25th Apr. 1888 ...	25th Apr. 1888 ...
48. Building a new bunglow for the Victoria Gardens Superintendent.	14,203	Do. ...	16th July 1891 ...	16th July 1891 ...
49. Erecting a refreshment room in the Victoria Gardens.	2,727	Do. ...	Do. ...	Do. ...
50. Constructing a Mangalore tiled roof over the Small-pox Hospital at Arthur Road.	5,633	Do. ...	Budget for 1892-93.	1st Mar. 1892 ...
51. Construction of Engineer's quarters at Love Grove pumping station.	12,009	Do. ..	Do. ...	Do. ...
WORKS IN PROGRESS.				
52. Retaining wall extension, Walkeshwar Road.	9,150 5,000	Cur. rev.	16th Jan. 1889 ...	16th Jan. 1889 ...
53. Roads and streets in Agripada and elsewhere.	22,50,000	Loan ...	13th May 1889... 11th Jan. 1893...	13th May 1889 11th Jan. 1893

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1893.	Remarks.
		Rs. a. p.	
30th Nov. 1892...	.....	3,484 1 1	Work is being carried out departmentally.
10th Oct. 1892 ...	1st June 1893 ...	3,81,09[illegible] 1 10	Messrs. Sitaram Lakshman & Bibra's contract executed. The work is in progress.
.....	.....	412 9 6	Tender of Mr. Dosabhoy Burjorji Padhra has been accepted; work will be started when the contract is executed.
.....	.....	876 12 7	Tender of Messrs. Mistri, Bhedwar & Vachagandhy has been accepted, and the work is in progress.
.....	.....	124 4 4	Tender of Messrs Mistri, Bhedwar & Co. was accepted and the work is in progress.
20th Feb. 1892...	20th Aug. 1892...	8,385 12 7	Work completed by Messrs. Gangaram Lakshman & Co. A one-chamber water system latrine for the chawl is being constructed.
.....	.....	1,200 8 4	Work completed by petty works contractors.
13th May 1892...	10th Jan. 1893 ...	21,039 13 9	The work which was entrusted to Messrs. Spencer & Co. has been completed. Accounts are to be adjusted.
15th Jan. 1892 ...	15th July 1892...	11,589 2 0	Final accounts being adjusted.
21st Jan. 1892 ...	21st May 1892 ...	2,049 14 2	Work completed.
.....	.....	4,665 14 8 =3,252 10 11 +1,413 3 9	Work completed. Final accounts being adjusted.
7th Nov. 1892...	8th Mar. 1893...	3,171 10 3	Work completed. Final accounts not adjusted.
14th Jan. 1892...	20th Mar. 1892...	10,857 9 8	Work in progress departmentally.
.....	.....	17,41,565 4 5	Lines of roads are marked and sanctioned. The land for the Agripada District is being gradually acquired. Sufficient area has been obtained and the construction of the streets will be taken in hand in due course. The extent of land to be acquired is large, and though the operation of acquisition is difficult, yet it is proceeding with all the expedition possible.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.—(*contd.*)				
WORKS IN PROGRESS—(*contd.*)				
54. Halalkores' Chawl in Cursetji Suklaji's Street.	86,000	35 Lakhs Loan.	23rd Jan. 1890.	Nov. 1890 ...
55. Foras Road Market	50,000	Loan ...	17th April 1890...	25th Sept. 1890...
56. Reconstructing portion of Gibbs Road.	46,200	Sur. cash balance.	10th Nov. 1892...	10th Nov. 1892...
57. Extension of the Mutton Markets, &c., Crawford Market.	49,942	Loan	26th Mar. 1888...	26th Mar. 1888 ...
58. New Market at Colaba	50,300 50,000	Loan ...	26th Mar. 1888...	26th Mar. 1888 ...
59. Filling in Municipal ground and building a retaining wall in front of house of Mr. Jaikisondas Gangadas at Walkeshwar Road.	4,743	Cur. rev...	Budget for 1892-93.	1st Mar. 1892 ...
WORKS TO BE COMMENCED.				
60. Purchase of land for chawls for the biggaris who clean the Arthur Crawford Market and building the chawls.	22,700	Loan ...	25th Apr. 1888 ...	25th Apr. 1888...
61. Purchase of 11,888 sq. yds. of land at DeLisle and Arthur Roads Junction.	28,676	Do. ...	26th Mar. 1888 ...	26th Mar. 1888...
62. Road through Nowrojee Hill from Elphinstone Bridge to Dongri Street.	8,32,023	Do. ...	Do. ...	Do. ...
63. Extension of Bhuleshwar Market	4,50,000	Do. ...	9th July 1888..	9th July 1888 ...
64. Fencing Municipal ground at Dadur....	572	Cur. rev...	Budget for 1892-93.	1st Mar. 1892 ...
FIRE BRIGADE STATIONS.				
65. Fire Brigade Station, Fort	86,201	4½ Lacs Loan.	3rd Sept. 1891.	3rd Sept. 1891...
66. Do. do. Colaba.....	26,468	Do. ...	Do. ...	Do. ...
67. Do. do. Babula Tank Rs. 36,569 Filling in of Tank „ 21,716	58,285	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1893.	Remarks.
		Rs. a. p.	
19th June 1891 ...	30th Oct. 1892 ...	80,651 14 6	Work completed. Compound wall remaining to be constructed.
.....	.....	15,503 1 3	Work entrusted to Messrs. Pallonji & Littlewood, and is in progress.
1st Oct. 1892 ...	.....	20,595 14 11	Road and slopes completed. Parapet wall and catchwater channels remaining.
.....	.....	8,309 3 9	Tenders have been received for the work. Work entrusted to Messrs. Jiwanji Dhunjibhoy & Co. Work in progress.
.....	.....	50,250 0 0	Site acquired and plans and estimates being prepared.
.....	.....	.....	Work in progress.
.....	.....	.....	It is proposed to build the chawls on the Municipal ground on the east of the Health Department bullock stables at Paltan Road. Tenders will soon be invited.
.....	.....	.....	Owner unwilling to sell.
.....	.....	75 0 0	Negotiations at a standstill.
.....	.....	2,93,878 12 10	Land acquired; plans are now ready and will be shortly submitted to Government for approval.
.....	.....	.....	Under consideration.
11th Jan. 1893.	7th March 1894..	334 5 7	Contract entrusted to Messrs. Spencer & Co.
.....	.....	.....	Tenders will soon be invited.
.....	.....	.....	Work of filling in entrusted to Mr. Sayaji Naguji.

BOMBAY MUNICIPALITY.

Name and description of Work or Grant.	Amount of Grant.	Fund to which Grand is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
FIRE BRIGADE STATIONS—(*contd.*)				
68. Quarters for the Chief Inspector, Water Works ... Rs. 29,612				
Filling in Babula Tank (*a*) „ 21,026	50,638	Water Works Department.	3rd Sept. 1891 ...	3rd Sept. 1891...
69. Ground at the junction of Kalbadevi and Bhuleshwar ... ... Rs. 40,814				
Bhuleshwar Fire Brigade Station... ... ... „ 12,001	52,815	4½ Lacs Loan.	Do. ...	Do. ...
70. Gamdevi Fire Brigade Station	8,273	Do. ...	Do. ...	Do. ...
71. Chinchpokli do. do.	7,209	Do. ...	Do. ...	Do. ...
72. Sankli Tank do. do. Rs. 1,07,905				
Filling in ... ... „ 67,197				
Acquisition of land... „ 33,104	2,08,206	Do. ..	Do. ...	Do. ...
73. Fire Brigade Station at Mazagon Peddar Market.	7,721	Do. ...	Do. ...	Do. ...
74. Fire Brigade Station at Dadar Rs. 8,208				
Filling in portion of Naigam Tank ... ... „ 2,194	10,402	Do. ...	Do. ...	Do. ...
75. Fire Brigade Station, Mahim Garden ...	6,564	Do. ...	Do. ...	Do. ...
76. Fire Brigade Station at DeLisle Road—				
Including the cost of making a road ... ... Rs. 14,276				
Cost of land ... ... „ 7,247				
Cost of filling in ... ... „ 6,503	28,026	Do. ...	Do. ...	Do. ...

(*a*) Out of this sum, Rs. 4,278 should be charged to Street Improvement Grant.

APPENDICES TO RECORD.

Date of commencement of the work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Mar. 1898.			Remarks.
		Rs.	a.	p.	
.....	.....	94	12	0	Work of filling in entrusted to Mr. Sayaji Naguji.
.....	.....	125	0	0	Land acquired and work entrusted to Mr. Lakhmidas Shamji.
.....	.....	.....			Plans ready.
.....	.....	.....			Do.
14th Nov. 1892.	.....	27,211	3	9	Contract for filling up given to Mr. Sayaji Naguji. The construction work will be undertaken when the filling is complete.
5th Jan. 1898.	6th July 1898.	162	5	7	Work in progress.
.....	.....	935	13	11	Filling in ; in progress.
.....	.....	161	9	7	Works in progress.
7th Jan. 1898.	7th Oct. 1898.	12,046	15	8	Works in progress.

BOMBAY MUNICIPALITY.

PROGRESS REPORTS UP TO THE END OF JUNE 1893

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS.				
WORKS COMPLETED.				
1. Excavating and widening the old Khosta Nalla at mile 2.	325	Loan	23rd Feb. 1893 ...	23rd Feb. 1893...
2. Raising manholes in No. 3 Division ...	61	Do.	Do. ...	Do. ...
3. Repairing 2 feet drain on Siphon No. 2, &c.	260	Do.	Do. ...	Do. ...
4. Repairs to Bhundarwada Reservoir	65,500+ 5,408 1-3	Cur. rev.	23rd Jan. 1890 18th Aug. 1892	1st March 1890 18th Aug. 1892
WORKS IN PROGRESS.				
5 Repairs to Bhandarwada Reservoir additional work.	7,290	Do.	5th May 1893...	5th May 1893 ...
6. Repairs to Tulsi main embankments ...	22,000+ 13,000	Do.	14th Jan. 1892. 27th Jan. 1892.	14th Jan. 1892 1st Mar. 1892
7. Connections at Chinchpokli between Tansa and Vehar mains.	7,164	Loan	16th June 1892...	16th June 1892...
8. Filling up and metalling the new ground at Chinchpokli junction of DeLisle and Clerk Roads.	2,882	Cur. rev....	2nd Feb. 1893 ...	1st March 1893.
9. Earth filling and loose stone pitching in No. 4 Division.	305	Loan	23rd Feb. 1893 ...	23rd Feb. 1893 ...
10. Provision of fire buckets and hose for Municipal Markets.	6,203	Cur. rev....	23rd Jan. 1890 6th Feb. 1893	23rd Jan. 1890 6th Feb. 1893
11. Alteration of 22 dipping wells, &c. ...	4,163	Balance out of Budget for 1891-92 and previous one.	.....	.....
WORKS TO BE COMMENCED.				
12. Covering storage basin at the Bhandarwada Reservoir and constructing filter over it.	44,500 1,15,500	Loan	14th Jan. 1892. 6th Feb. 1893.	14th Jan. 1892. 1st Mar. 1893.
	1,60,000			
13. Renewals of existing mains	1,00,000	Cur. rev...	30th Jan. 1893 ...	1st March 1893.
14. Further alteration and improvements at the Malabar Hill Reservoir.	75,000	Loan	6th Feb. 1893 ...	Do. ...
15. Extension of water mains in various places.	30,000	Do.	Do. ...	Do. ...
16. Dry rubble pitching on siphon No. 5 ...	4,600	Do.	23rd Feb. 1893 ...	23rd Feb. 1893...

APPENDICES TO RECORD.

OF NEW WORKS NOW IN COURSE OF CONSTRUCTION.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
April 1893 ...	30th June 1893 ...	.....	Work completed, but accounts not adjusted.
May 1893 ...	Do. ...	38 8 1	Do. do.
Do. ...	Do. ...	214 14 0	Do. do.
March 1891 ...	31st July 1893 ...	68,267 0 0	Accounts to be adjusted when openings in roof closed after completion of additional work.
.....	.....	.....	Work in progress by Indian Patent Stone Company.
11th Mar. 1892...	31st Jan. 1894 ..	19,510 0 0	Work in progress by contract with Messrs. Byramji Jehangir & Co.
July 1892 ...	31st Aug. 1893 ...	4,217 0 0	Work in progress. Some special castings required.
May 1893 ...	31st July 1893 ...	.....	Work in progress, contract with Messrs. Spencer & Co.
Do. ...	Do. ...	213 14 5	Work in progress departmentally.
Do. ...	31st Dec. 1893 ...	260 0 0	Work in progress.
May 1892 ...	30th June 1894...	1,791 3 3	Do.
Not commenced yet.	31st May 1895 ...	278 14 4	Drawings being prepared.
Do. ...	31st May 1894 ...	.....	List of places being prepared. Messrs. Walsh, Lovett & Co.'s tender for pipes accepted.
Do. ...	30th Sept. 1893...	.....	Report on further works required submitted to the Municipal Commissioner.
Do. ...	31st May 1894 ...	.....	Messrs. Walsh, Lovett & Co.'s tender for pipes accepted.
Do. ...	Do. ...	.....	Details under consideration.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS—(*contd.*)				
WORKS TO BE COMMENCED—(contd.)				
17. Filling up to pipe embankment level a strip of land taken up for the pipe line at Coorla to store pipes.	2,640	Loan	23rd Feb. 1893 ...	23rd Feb. 1893 ...
18. Masonry required at Ghatkopar clearing sluice.	2,500	Do.	Do. ...	Do. ...
19. Work at basis of cabins, say 16 @ Rs.110.	1,760	Do.	Do. ...	Do. ...
20. Renewing boundary marks	2,000	Do.	Do. ...	Do. ...
21. Allowances for fixing gratings at siphon heads and tails.	250	Do.	Do. ...	Do. ...
22. Ghatkopar strainers	12,000	Do.	Do. ...	Do. ...
23. Flooring Bassein bridge and culverts ...	13,000	Do.	Do. ...	Do. ...
24. Additional work, Ghatkopar bridge.....	1,600	Do.	Do. ...	Do. ...
25. Widening embankment at Bassein Creek.	10,000	Do.	Do. ...	Do. ...
26. Memorial structure at Tansa	2,000	Do.	Do. ...	Do. ...
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS.				
WORKS COMPLETED.				
27. Queen's Road and Girgaum sewerage and house connection works.	11,14,929	Cur. rev. ..	28th July 1887 ...	28th July 1887 ...
28. Six-chamber latrine and six-chamber urinals in Gilder Street at the junction of Falkland Road and Gilder Street.	4,180	Do. ...	9th Feb. 1891 ...	1st Mar. 1891 ...
29. Construction of a storm-water drain in Hornby Road from the Salvation Army Hall to Bazar Gate Street.	21,598	Loan ...	6th Apr. 1892 ...	6th Apr. 1892...
30. Construction of pipe sewers in Parel Village Main Road and Government House Road, Parel.	77,603	Do.	14th Jan. 1892 ...	14th Jan. 1892 ...
31. Vent shafts on Ripon Road sewer ...	3,047	Cur. rev....	Budget for 1892-93.	1st Mar. 1892 ...
32. Construction of 7 manholes with covers and frames in Kolsa Street.	484	Do. ...	Budget for 1893-94.	1st Mar. 1893 ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
Not commenced yet.	30th Nov. 1893...	.....	Contract drawings ready.
Do. ...	31st March 1894...	.....	Details under consideration.
Do. ...	Do. ...	.....	Do.
Do. ...	Do. ..	.....	Number required being ascertained.
Do. ...	30th June 1893 ...	24 0 0	Work to be undertaken departmentally.
Do. ...	31st March 1894..	.....	Contract drawings almost ready.
Do. ...	Do. ...	.....	Contract papers being prepared.
Do. ...	Do. ...	1,065 0 0	Iron work fixed by Messrs. Richardson & Cruddas Details of masonry under consideration.
Do. ...	31st May 1894 ...	.....	Detailed drawings to be prepared.
Do. ...	Do. ...	.....	Drawings under preparation.
Nov. 1888...	1st Feb. 1891...	8,88,425 0 0	Work entrusted to Messrs. Bulkley & Co. and completed on 12th May 1891. Final accounts with them are adjusted. Some portion is being carried out departmentally.
2nd Jan. 1892...	29th Feb. 1892...	3,719 8 0	Work completed by petty works contractors. Accounts adjusted. Some slight works recently suggested by the Health Officer are being executed.
5th July 1892 ...	24th Nov. 1892 ...	11,956 0 0	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work has been completed on the 25th March 1893. Final accounts are to be adjusted.
26th Apr. 1892 ...	22nd Jan. 1893 ...	15,115 0 0	Work completed. Account not adjusted.
.....	.....	177 6 4	Tender of Messrs. Mistri, Bhedwar & Co. was accepted, the work is completed and accounts are to be adjusted.
.....	.....	437 11 6	Work completed departmentally. Accounts are to be adjusted.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS IN PROGRESS.				
33. House connections without privy fittings in the first sections of Drainage Scheme.	(*a*) 5,78,611-14-4	Loan	8th Dec. 1881 ...	5th May 1885 ...
34. Automatic flushers at heads of gullies..	5,570	Do. ...	Do. ...	.....
35. New latrines and urinals	(*b*) 41,984-13-0 + 12,000-0-0	Cur. rev.	16th Oct. 1889 ...	16th Oct. 1889 ...
36. Diverting pipe sewers along the site of the proposed overbridge at Falkland Road to allow the construction of the bridge.	10,338	Do.	28th Aug. 1890...	28th Aug. 1890 ...
37. House connections in Agripada District.	2,48,642	Loan	8th Oct. 1888 ...	1st July 1890 ...
38. Arrangements for flushing Parel and Bellasis Road storm-water drain from Babula Tank and Nagpada Tank.	*4,295-10-1	Cur. rev...	23rd Jan. 1890 ...	1st Mar. 1890 ...

(*a*) House connections without privy fittings ... ...
Add—Transferred from Argyll Road, Standing Committee's Resolution No. 5192,

Less—Amount transferred to meet excess on Pumping Engines, Town Council's

(*b*) Renewed grant ... ...
Add—Grant budgetted for 1892-93 ... ...
Additional grant sanctioned for the latrine to be erected in the Kennedy Sea Face

* Budget grant ... ...
Add—Transferred from Item 12, Detailed Statement No. 12, Budget Estimate for 1892-93.

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
8th Jan. 1887 25th Jan. 1892	31st July 1888 31st July 1893	2,34,616 0 0	Khetwadi section of the work is done; other portions in progress.
Do.	Do.	.....	Work ordered to be proceeded with departmentally, but stopped pending decision of Corporation as regards house-connections in general.
6th Dec. 1889 ...	.....	15,368 8 5	Contract for latrines and urinals in Erskine Road, Picket Road and Mazagon Road and Jackaria Musjid Street given to Messrs. Mistri & Bhedwar, and the work of construction of latrines and urinals at Moombadevi Road is stopped as per Commissioner's recent orders. Tender of Mr. Sorabjee Jamsetjee for the construction of latrines and urinals in Kennedy Sea Face Gardens has been accepted and this work is in progress.
1st Nov. 1890 ...	.....	5,128 8 2	The work is being executed departmentally, but now stopped pending acquisition of land.
20th Oct. 1890 ...	15th Oct. 1892 ...	2,22,497 1 7	The whole of the contract work was completed before 30th September 1892, except connections to two houses and five vent shafts. House connection work is stopped in accordance with Corporation's Resolution No. 3142, dated 30th June 1892.
21st Apr. 1891 ...	.....	3,167 14 1	The work at Babula Tank is completed. The work at Nagpada Tank has now been ordered to be entrusted to petty works contractors.

... ... dated 20th June 1888	Rs. 5,71,165 0 0 „ 19,046 14 4
	Rs. 5,90,211 14 4
Resolution No. 52, dated 13th January 1882...	„ —11,600 0 0
	Rs. 5,78,611 14 4

... ...	Rs. 25,422 13 0
... ...	„ 12,000 0 0
Gardens	„ 4,562 0 0
	Total Rs. 41,984 13 0

... ...	Rs. 3,844 0 0
... ...	„ 451 10 1
	Total Rs. 4,295 10 1

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS IN PROGRESS—(*contd.*)				
39. Construction of sewer flushing arrangements.	14,000	Loan	23rd Jan. 1890 ...	1st Mar. 1890 ...
40. Closing up with cast-iron the perforations in manhole covers.	4,000	Cur. rev..	9th Feb. 1891 ...	1st Mar. 1891 ...
41. Constructing pipe sewers and metal vent shafts in Parel village.	20,852	Loan ...	25th Feb. 1892 ...	25th Feb. 1892...
42. Experimental Drainage Works	10,000	Sur. cash balance.	8th Sept. 1892...	8th Sept. 1892...
43. Construction of engine and boiler-house at Love Grove. Foundation of engines above 78·50 T. H. D. and the foundations of boilers; erection of machinery.	4,40,000	Loan	8th Sept. 1892...	8th Sept. 1892...
44. Filling and pitching slope of portion of Haines Road forming boundary of the storm-water reservoir.	4,888	Cur. rev...	16th Jan. 1889 ...	16th Jan. 1889 ...
45. Arching over main drain at Arthur Road Crossing.	18,000	Loan ...	14th Jan. 1892 ...	14th Jan. 1892 ...
46. Construction of Storage Tank and extension of drain at Colaba Foreshore.	3,386	Sur. cash balance.	4th May 1893 ...	4th May 1893...
47. Erection of hopper at Thomas Street ...	1,247	Do. ...	15th May 1893 ...	15th May 1893 ...
WORKS TO BE COMMENCED.				
48. Engraving numbers on manhole covers.	290	Cur. rev...	Budget for 1893-94.	1st Mar. 1893 ...
49. Two square manholes on Queen's Road sewer.	600	Do. ...	Do. ...	Do. ...
50. Erecting metal vent shafts in Abdool Rahimon Street.	2,077	Do. ...	Do. ...	Do. ...
51. Construction of a chawki for the Chief Inspector of Drains at Foras Road.	2,474	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
20th Sept. 1891...	31st Mar, 1894...	9,489 0 0	Work is being executed departmentally, and is stopped for the present as the height of sewage in the sewers does not allow it to be carried out.
1st Oct. 1891 ...	31st Dec. 1893 ...	3,102 1 5	Work entrusted to Messrs. Richardson & Cruddas and is in progress; the probable time of completion cannot be fixed.
5th July 1892 ...	31st July 1893...	5,462 0 0	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work is now in progress. The contract time was up on the 18th February 1893.
30th Nov. 1892...	.....	3,566 8 9	Work is being carried out departmentally and is nearly completed.
10th Oct. 1892 ...	1st June 1893 ...	4,14,565 13 3	Messrs. Sitaram Lakshman & Bibra's contract executed. The work practically completed. Some minor items of work are in progress.
.....	.....	742 13 8	Tender of Mr. Dosabhoy Burjorji Padhra has been accepted; work is in progress.
.....	.....	5,928 0 0	Tender of Messrs. Mistri, Bhedwar & Vachagandhy has been accepted, and the work is in progress. The contract work is completed, but some extra work is in progress.
.....	.....	2,807 12 8	Work stopped on account of monsoon.
.....	.....	1,229 2 10	Work stopped.
.....	.....	.....	Will be commenced after the monsoon.
.....	.....	.....	These will be taken in hand departmentally after the monsoon.
.....	.....	.....	Contract and specification are being prepared.
.....	.....	.....	Plans and estimates have been completed and tender will shortly be invited.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.				
WORKS COMPLETED.				
52. Chawl of 17 rooms at Love Grove ...	9,367	Cur. rev...	9th Feb. 1891 ...	1st Mar. 1891 ...
53. Night-soil depôt near the junction of DeLisle and Parbhadevi Roads.	26,394	Do. ...	25th Apr. 1888 ...	25th Apr. 1888 ...
54. Construction of Engineer's quarters at Love Grove pumping station.	12,009	Do. ...	Budget for 1892-93.	1st March 1892...
55. Retaining wall extension, Walkeshwar Road.	9,150 5,000	Cur. rev.	16th Jan. 1889 ...	16th Jan. 1889 ...
56. Reconstructing portion of Gibbs Road.	46,200	Sur. cash balance.	10th Nov. 1892...	10th Nov. 1892...
57. Filling in Municipal ground and building a retaining wall in front of house of Mr. Jaikisondas Gangadas at Walkeshwar Road.	4,743	Cur. rev ...	Budget for 1892-93.	1st Mar. 1892 ...
WORKS IN PROGRESS.				
58. Roads and streets in Agripada and elsewhere.	22,50,000	Loan ...	13th May 1889... 11th Jan. 1893...	13th May 1889 11th Jan. 1893
59. Halalkores' Chawls in Cursetji Suklaji's Street.	86,000	35 Lakhs Loan.	23rd Jan. 1890.	Nov. 1890 ...
60. Foras Road Market	50,000	Loan ...	17th April 1890...	25th Sept. 1890...
61. Extension of the Mutton Markets, &c., Crawford Market.	49,942	Do.	26th Mar. 1888...	26th Mar. 1888 ...
62. Health Department stables in F and G Wards.	78,744	Do.	12246 / 16th Feb. 1893.	25th Sept. 1890
WORKS TO BE COMMENCED.				
63. New Market at Colaba	50,300 50,000	Loan ...	26th Mar. 1888...	26th Mar. 1888 ...
64. Purchase of land for chawls for the biggaris who clean the Arthur Crawford Market and building the chals.	22,700	Loan ...	25th Apr. 1888 ...	25th Apr. 1888 ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
20th Feb. 1892...	20th Aug. 1892...	8,521 14 4	Work completed by Messrs. Gangaram Lakshman & Co. A one-chamber water system latrine for the chawl is being constructed.
13th May 1892...	10th Jan. 1893 ...	21,189 13 9	The work which was entrusted to Messrs. Spencer & Co. has been completed. Accounts are to be adjusted.
7th Nov. 1892...	8th Mar. 1893...	7,316 6 4	Work completed. Final accounts not adjusted.
14th Jan. 1892...	20th Mar. 1892...	12,425 9 3	Work completed.
1st Oct. 1892 ...	.....	25,417 15 2	Road slopes and catch pit water channel completed. Parapet wall will be constructed if found necessary after the rains.
13th Feb. 1893...	13th June 1893 ...	1,844 1 8	Work which was entrusted to Mr. Lakhmidas Shamji has been completed.
.....	.....	17,62,749 4 0	Lines of roads marked out and sanctioned. The land for the Agripada District is being gradually acquired. Sufficient area has been obtained and the construction of the streets will be taken in hand in due course. The extent of land to be acquired is large, and though the operation of acquisition is difficult, yet it is proceeding with all the expedition possible.
19th June 1891 ...	30th Oct. 1892 ...	82,436 0 6	Work completed. Compound wall being constructed. The work entrusted to annual repair contractor.
5th July 1892...	10th Aug. 1893...	26,634 7 4	Work entrusted to Messrs. Pallonji & Littlewood, and is in progress. Approaching completion.
31st Oct. 1892 ...	30th Sept. 1893...	13,143 11 7	Work entrusted to Messrs. Jiwanji Dhunjibhoy & Co. Roof work in progress.
.....	.....	.....	Tender of Messrs. Perozsha Dhunjibhoy Patel and Hormasji Jamasji Mistri has recently been accepted.
.....	.....	50,250 0 0	Site acquired and plans and estimates are in hand.
.....	.....	.....	It is proposed to build the chawls on the Municipal ground on the east of the Health Department bullock stables at Paltan Road. Tenders will be re-invited.

BOMBAY MUNICIPALITY.

Name and description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.—(*contd.*)				
WORKS TO BE COMMENCED—(*contd.*)				
65. Purchase of 11,838 sq. yds. of land at DeLisle and Arthur Roads Junction.	23,676	Loan ...	26th Mar. 1888 ...	26th Mar. 1888...
66. Road through Nowrojee Hill from Elphinstone Bridge to Dongri Street.	3,32,023	Do. ...	Do. ...	Do. ...
67. Extension of Bhuleshwar Market	4,50,000	Do. ...	9th July 1888...	9th July 1888 ...
68. Fencing Municipal ground at Dadur....	572	Cur. rev...	Budget for 1892-93.	1st Mar. 1892 ...
69. Health Department Bullock stables and quarters for sweepers.	1,50,000	35 Lacs Loan.	17th April 1890	25th Sept. 1890...
70. Health Department Biggaries' Chal at Bori Bandar.	66,000	Loan	12246 / 16th Feb. 1893.	Do. ...
71. Providing latrine and urinal to the Engineer's office, A Ward.	500	Cur. Rev...	Budget for 1893-94.	1st March 1893...
72. Making of streets which have become public under Municipal Act.	5,000	Do.	.....	.....
73. Footbridge over the G. I. P. Railway at Byculla on the road from Parel Road to the Junction of DeLisle Road and Haines Road.	10,948	Do.	.....	.....
74. Construction of a road across Khandia Tank in extension of Khandia Street.	4,637	Do.	.....	.....
75. Chaukies for Depot mucadams, A-3, B-4, C-1, D-3, E-4, F-3, and G-3, in all 21, at Rs. 80 each.	1,680	Do.	.....	.....
76. Fencing the ground of metal Depot at Sonapur.	2,000	Do.	.....	.....
77. Paving round the statuary and constructing ornamental wrought iron fencing to the same in front of the New Municipal Building and constructing fencing with gates, walls, &c., on the north side of the private road to the north of the building.	7,276	Do.	.....	.....
FIRE BRIGADE STATIONS.				
WORKS IN PROGRESS.				
78. Fire Brigade Station, Fort	36,201	4½ Lacs Loan.	3rd Sept. 1891.	3rd Sept. 1891...
79. Fire Brigade Station, Babula Tank .....Rs. 86,569				
Filling in of Tank „ 21,716	58,285	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of June 1893.	Remarks.
		Rs. a. p.	
.....	.....	.....	Owner unwilling to sell.
.....	.....	75• 0 0	Negotiations at a standstill.
.....	.....	2,93,886 4 10	Land acquired; plans submitted to Government for approval.
.....	.....	.....	Under consideration.
.....	.....	.....	Do.
.....	.....	.....	Tenders re-invited.
.....	.....	.....	Plans and estimates are being prepared.
.....	.....	.....	
.....	.....	.....	Amount made over to G. I. P. Railway Company for the construction.
.....	.....	.....	Tenders will be invited shortly.
.....	.....	.....	Drawings in hand.
.....	.....	.....	Under consideration.
.....	.....	.....	This cannot be carried out until the ground in front of the new Municipal Office is cleared.
11th Jan. 1893.	7th March 1894.	612 5 7	Contract entrusted to Messrs. Spencer & Co. Foundations and plinth completed. Superstructure in progress.
.....	.....	432 12 0	Work of filling in entrusted to Mr. Sayaji Naguji.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available
	Rs.			
FIRE BRIGADE STATIONS—(*contd.*)				
WORKS IN PROGRESS.				
80. Quarters for the Chief Inspector, Water Works ... Rs. 29,612 Filling in Babula Tank (*a*) „ 21,026	50,638	Water Works Department.	3rd Sept. 1891 ...	3rd Sept. 1891 ...
81. Ground at the junction of Kalbadevi and Bhuleshwar Rs.40,814 Bhuleshwar Fire Brigade Station... ... ... „ 12,001	52,815	4½ Lacs Loan.	Do. ...	Do. ...
82. Sankli Tank Fire Bde. Stn. Rs. 1,07,905 Filling in... ... ... „ 67,197 Acquisition of land ... „ 33,104	2,08,206	Do. ..	Do. ...	Do. ...
83. Fire Brigade Station at Mazagon Pedder Market.	7,721	Do. ...	Do. ...	Do. ...
84. Fire Brigade Station at Dadar Rs. 8,208 Filling in portion of Naigam Tank ... ... „ 2,194	10,402	Do. ...	Do. ...	Do. ...
85. Fire Brigade Station, Mahim Garden ...	6,564	Do. ...	Do. ...	Do. ...
86. Fire Brigade Station at DeLisle Road— Including the cost of making a road ... ... Rs. 14,276 Cost of land ... ... „ 7,247 Cost of filling in ... ... „ 6,503	28,026	Do. ...	Do. ...	Do. ...
WORKS TO BE COMMENCED.				
87. Fire Brigade Station, Colaba	26,468	Do. ...	Do. ...	Do. ...
88. Do do. Gamdevi	8,278	Do. ...	Do. ...	Do. ...
89. Do. do. Chinchpokli.....	7,209	Do. ...	Do. ...	Do. ...

(*a*) Out of this sum, Rs. 4,278 should be charged to Street improvement grant.

Date of commencement of the work.	Probable date of completion of the Work.	Certified Expenditure up to the end of June 1893.			Remarks.
		Rs.	a.	p.	
.....	.....	627	6	6	Work of filling in entrusted to Mr. Sayaji Naguji.
.....	8th Nov. 1893...	214	0	0	Land acquired and work entrusted to Mr. Lakmidas Shamji; is in progress.
14th Nov. 1892.	15th June 1893 ...	39,543	2	8	Contract for filling up given to Mr. Sayaji Naguji. Nearly completed. The construction work will be undertaken when the filling is duly consolidated by the rains.
5th Jan. 1893.	6th July 1893.	2,427	8	11	Work entrusted to Messrs. Gangaram Lakshman & Co.; is nearly completed.
21st Feb. 1893 ...	30th April 1893...	1,848	15	1	Filling in completed; other work in progress.
25th Feb. 1893 ...	31st August 1893	2,254	5	0	Work entrusted to Messrs. Mistri, Bhedwar, Vachaghandi & Co.; is in progress.
7th Jan. 1893.	7th Oct. 1893.	14,890	4	8	Work entrusted to Messrs. Mistri, Bhedwar, Vachaghandi & Co.; is in progress.
.....	.....	196	0	0	Tenders have been invited.
.....	.....	66	4	0	Plans ready.
.....	.....	53	8	0	Do.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
SANITARY & OTHER MISCELLANEOUS WORKS.				
WORKS IN PROGRESS.				
90. Construction of a detached pork shop at the Pedder Market.	1,354	Cur. Rev.	.....	.....
91. Latrines at Bullock Hospital, Sankli Road.	184	Do.	.....	.....
WORKS TO BE COMMENCED.				
92. Latrines for grave diggers' chal, Arthur Road.	200	Do.	.....	.....
93. Constructing a 12-chamber latrine at Worli Middlepakhadi.	3,010	Loan Works	Budget, 1893-94...	1st March 1893.
94. Constructing a 12-chamber latrine at Worli Pakhadi.	2,240	.....	.....	.....
95. Filling in compound of the Small-pox Hospital at Arthur Road and constructing a slab drain.	6,031	.....	.....	.....
96. Paving and V-draining the van siding behind the sheep and cattle slaughter houses at Bandora.	9,830	.....	.....	.....

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable date of completion of the Work.	Certified Expenditure up to the end of June 1893.	REMARKS.
		Rs. a. p.	
.....	.....	.....	Work stopped pending settlement of the site. The sanctioned site is objected to by people living in its neighbourhood.
.....	.....	.....	An order has recently been given to the petty works contractor to do this work.
.....	.....	.....	Plans are being prepared.
.....	.....	.....	Work will be taken in hand shortly.
.....	.....	.....	Do. do.
.....	.....	.....	Detailed plan is being prepared.
.....	.....	.....	Work will be taken in hand shortly.

BOMBAY MUNICIPALITY.

PROGRESS REPORTS UP TO THE END OF SEPTEMBER

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS.				
WORKS COMPLETED.				
1. Excavating and widening the old Khosla Nalla at mile 2.	325	Loan	23rd Feb. 1893 ...	23rd Feb. 1893...
2. Repairs to Bhandarwada Reservoir {	65,500+ 5,408-1-3 }	Cur. rev.	{ 23rd Jan. 1890 18th Aug. 1892 }	{ 1st March 1890 18th Aug. 1892 }
3. Repairs to Bhandarwada Reservoir additional work.	7,290	Do. ...	5th May 1893...	5th May 1893 ...
WORKS IN PROGRESS.				
4. Repairs to Tulsi main embankments ...	22,000+ 13,000	Do. ...	{ 14th Jan. 1892. 27th Jan. 1892. }	{ 14th Jan. 1892 1st Mar. 1892 }
5. Connections at Chinchpokli between Tansa and Vehar mains.	7,164	Loan	16th June 1892...	16th June 1892...
6. Earth filling and loose stone pitching in No. 4 Division.	305	Do.	23rd Feb. 1893 ...	23rd Feb. 1893 ...
7. Provision of fire buckets and hose for Municipal Markets.	6,203	Cur. rev....	{ 23rd Jan. 1890 6th Feb. 1893 }	{ 23rd Jan. 1890 6th Feb. 1893 }
8. Alteration of 22 dipping wells, &c. ...	1,163	Balance out of Budget for 1891-92 and previous one.	.....	.....
9. Dry rubble pitching on siphon No. 5 ...	1,600	Loan	23rd Feb. 1893 ...	23rd Feb. 1893...
10. Filling up to pipe embankment level a strip of land taken up for the pipe line at Coorla to store pipes.	2,610	Do.	Do. ...	Do. ...
11. Allowances for fixing gratings at siphon heads and tails.	250	Do.	Do. ...	Do. ...
12. Additional work, Ghatkopar bridge.....	1,600	Do.	Do. ...	Do. ...
WORKS TO BE COMMENCED.				
13. Covering storage basin at the Bhandarwada Reservoir and constructing filter over it.	44,500 1,15,500	Loan	{ 14th Jan. 1892. 6th Feb. 1893. }	{ 14th Jan. 1892. 1st Mar. 1893. }
	1,60,000			
14. Renewals of existing mains	1,00,000	Cur. rev...	30th Jan. 1893 ...	1st March 1893.
15. Further alteration and improvements at the Malabar Hill Reservoir.	75,000	Loan	6th Feb. 1893 ...	Do. ...
16. Extension of water mains in various places.	30,000	Do.	Do. ...	Do. ...

1893 OF NEW WORKS NOW IN COURSE OF CONSTRUCTION.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
April 1893 ...	August 1893 ..	320 8 6	Work completed, but accounts not adjusted.
March 1891 ...	30th Nov. 1893 ...	68,267 0 0	Accounts to be adjusted when openings in roof closed after completion of additional work.
July 1893 ...	23rd July 1893 ...	6,222 5 11	Accounts not adjusted.
11th Mar. 1892...	31st Jan. 1894 ..	19,810 0 0	Work in progress by contract with Messrs. Byramji Jehangir & Co.
July 1892 ...	Feb. 1894 ...	4,217 0 0	Work in progress. Some special castings required.
Do. ...	Do. ...	224 0 2	Work in progress departmentally.
Do. ...	31st Dec. 1893 ...	434 8 7	Do. do.
May 1892 ...	30th June 1894...	2,176 13 4	Do. do.
July 1893 ...	31st May 1894 ...	56 9 0	Do. do.
30th Sept. 1893...	31st Jan. 1894 ...	.....	Contract let to Messrs. Framji, Mahomedally & Co. Work in progress.
June 1893 ...	Do. ...	51 1 7	Work in progress departmentally.
Apr. 1893 ...	31st Mar. 1894 ...	1,065 0 0	Ironwork fixed by Messrs. Richardson & Cruddas. Drawings of masonry works are not ready.
Not commenced yet.	31st May 1895 ...	818 11 4	Drawings ready.
Do. ...	31st May 1894 ...	.....	List of places being prepared. Messrs. Walsh, Lovett & Co. supplying pipes.
Do. ...	30th Sept. 1894...	.....	Report on further works required submitted to the Municipal Commissioner.
Do. ...	31st May 1894 ...	.....	Messrs. Walsh, Lovett & Co. supplying pipes.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS—(*contd.*)				
WORKS TO BE COMMENCED—(contd.)				
17. Masonry required at Ghatkopar clearing sluice.	2,500	Loan ...	23rd Feb. 1893..	23rd Feb. 1893...
18. Work at basis of cabins, say 16 @ Rs.110.	1,760	Do.	Do. ...	Do. ...
19. Renewing boundary marks	2,000	Do.	Do. ...	Do. ...
20. Ghatkopar strainers	12,000	Do.	Do. ...	Do. ...
21. Flooring Bassein bridge and culverts ...	13,000	Do.	Do. ...	Do. ...
22. Widening embankment at Bassein Creek.	10,000	Do.	Do. ...	Do. ...
23. Memorial structure at Tansa	2,628	Do.	Do. ...	Do. ...
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS.				
WORKS COMPLETED.				
24. Queen's Road and Girgaum sewerage and house connection works.	11,14,929	Cur. rev..	28th July 1887 ...	28th July 1887 ...
25. Construction of a storm-water drain in Hornby Road from the Salvation Army Hall to Bazar Gate Street.	21,598	Loan ...	6th Apr. 1892 ...	6th Apr. 1892...
26. Construction of pipe sewers in Parel Village Main Road and Government House Road, Parel.	77,603	Do. ...	14th Jan. 1892 ...	14th Jan. 1892 ...
27. Vent shafts on Ripon Road sewer ...	3,047	Cur. rev....	Budget for 1892-93.	1st Mar. 1892 ...
28. New latrines and urinals	(*a*) 22,344-15-11 + 12,000-0-0 = 34,344-15-11	Cur. rev.	16th Oct. 1889 ...	16th Oct. 1889 ...

(*a*) Renewed grant ... ...
Add—Grant budgetted for 1892-93 ... ...

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
Not commenced yet.	31st March 1894...	.....	Drawings nearly ready.
Do. ...	Do. ...	.....	Drawings being prepared.
Do. ...	Do. ..	.....	Number required being ascertained.
Do. ...	Do. ...	.....	Contract drawings almost ready.
Do. ...	Do. ...	.....	Contract papers being prepared.
Do. ...	31st May 1894 ...	.....	Detailed drawings being prepared.
Do. ...	Do. ...	.....	Design sanctioned by Standing Committee.
Nov. 1888...	12th May 1891 ...	8,88,921 0 0	Work entrusted to Messrs. Bulkley & Co. and completed on 12th May 1891. Final accounts with them are adjusted. Some portion is being carried out departmentally.
5th July 1892 ...	25th March 1893.	12,068 0 0	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work has been completed on the 25th March 1893. Final accounts are to be adjusted.
26th Apr. 1892 ...	22nd Jan. 1893 ...	15,458 12 0	Work completed ; account not adjusted.
24th Feb. 1893 ...	7th Sept. 1893...	177 6 4	The work is completed and accounts are to be adjusted.
6th Dec, 1889 ...	.....	4,135 12 4	The work of construction of latrines and urinals in Erskine Road, Picket Road and Mazagon Road and Jackaria Musjid Street completed by Messrs. Mistri & Bhedwar ; accounts are being adjusted ; the work of constructing a urinal in Dalal Street is also completed and accounts adjusted. The work of constructing latrines and urinals in Kennedy Sea Face Gardens is in progress.

... ...	Rs. 22,344 15 11
... ...	„ 12,000 0 0
	Total... Rs. 34,344 15 11

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS COMPLETED—(*contd.*)				
29. Construction of engine and boiler house at Love Grove. Foundation of engines above 78·50 T. H. D. and the foundations of boilers; erection of machinery.	4,40,000	Loan	8th Sept. 1892...	8th Sept. 1892...
30. Filling and pitching slope of portion of Haines Road forming boundary of the storm-water reservoir.	4,888	Cur. rev...	16th Jan. 1889 ...	16th Jan. 1889 ...
31. Arching over main drain at Arthur Road Crossing.	18,000	Loan ...	14th Jan. 1892 ...	14th Jan. 1892 ...
32. Erection of hopper at Thomas Street ...	1,247	Sur. Cash Balance.	15th May 1893 ...	15th May 1893 ...
WORKS IN PROGRESS.				
33. House connections without privy fittings in the first sections of Drainage Scheme.	(*a*) 5,78,611-14-4	Loan	8th Dec. 1881 ...	5th May 1885 ...
34. Automatic flushers at heads of gullies..	5,570	Do. ...	Do. ...	.....
35. Diverting pipe sewers along the site of the proposed overbridge at Falkland Road to allow the construction of the bridge.	10,338	Cur. rev...	28th Aug. 1890...	28th Aug. 1890 ...
36. House connections in Agripada District.	2,48,642	Loan	8th Oct. 1888 ...	1st July 1890 ...
37. Arrangements for flushing Parel and Bellasis Road storm-water drain from Babula Tank and Nagpada Tank.	*4,295-10-1	Cur. rev...	23rd Jan. 1890 ...	1st Mar. 1890 ...

(*a*) House connections without privy fittings ... ...
Add—Transferred from Argyll Road, Standing Committee's Resolution No. 5192,

Less—Amount transferred to meet excess on Pumping Engines, Town Council's

* Budget grant ... ...
Add—Transferred from Item 12, Detailed Statement No. 12, Budget Estimate for 1892-93

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
10th Oct. 1892 ...	1st June 1893 ...	4,20,698 10 3	The work completed and the accounts are being adjusted.
8th May 1893 ...	1st Sep. 1893 ...	1,193 11 3	Work completed; accounts are to be adjusted.
10th Dec. 1892 ...	5th Aug. 1893 ...	6,001 10 3	Work completed; accounts to be adjusted, some extra work being executed by Messrs. Mistri, Bhedwar & Co.
15th May 1893 ...	23rd Sep. 1893 ...	1,230 9 3	Work completed; accounts to be adjusted.
8th Jan. 1887 25th Jan. 1892	31st July 1888 31st July 1893	2,30,083 0 0	Khetwadi section of the work is done; other portions in progress.
Do.	Do.	.....	Work ordered to be proceeded with departmentally, but stopped pending decision of Corporation as regards house-connections in general.
1st Nov. 1890 ...	.....	5,428 8 2	The work is being executed departmentally, but now stopped pending acquisition of land.
20th Oct. 1890 ...	15th Oct. 1892 ...	2,23,143 12 7	The whole of the contract work was completed before 30th September 1892, except connections to two houses and five vent shafts. House connection work is stopped in accordance with Corporation's Resolution No. 3142, dated 30th June 1892.
21st Apr. 1891 ...	.....	8,224 2 6	The work at Nagpada Tank is stopped as the tank is proposed to be filled up.

... ...	Rs. 5,71,165 0 0
dated 20th June 1888	„ 19,046 14 4
	Rs. 5,90,211 14 4
Resolution No. 52, dated 13th January 1882...	„ —11,600 0 0
	Rs. 5,78,611 14 4
... ...	Rs. 3,844 0 0
... ...	„ 451 10 1
	Total... Rs. 4,295 10 1

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS IN PROGRESS—(*contd.*)				
38. Construction of sewer flushing arrangements.	14,000	Loan	23rd Jan. 1890 ...	1st Mar. 1890 ...
39. Closing up with cast-iron the perforations in manhole covers.	4,000	Cur. rev...	9th Feb. 1891 ...	1st Mar. 1891 ...
40. Constructing pipe sewers and metal vent shafts in Parel village.	20,852	Loan ...	25th Feb. 1892 ...	25th Feb. 1892...
41. Experimental Drainage Works	10,000	Sur. cash balance.	8th Sept. 1892...	8th Sept. 1892...
42. Construction of Storage Tank and extension of drain at Colaba Foreshore.	8,386	Do. ...	4th May 1893 ...	4th May 1893...
WORKS TO BE COMMENCED.				
43. Engraving numbers on manhole covers.	290	Cur. rev...	Budget for 1893-94.	1st Mar. 1893 ...
44. Two square manholes on Queen's Road sewer.	600	Do. ...	Do. ...	Do. ...
45. Erecting metal vent shafts in Abdool Rahimon Street.	2,077	Do. ...	Do. ...	Do. ...
46. Construction of a chawki for the Chief Inspector of Drains at Foras Road.	2,474	Do. ...	Do. ...	Do. ...
47. Providing latrine and urinal to the Engineer's office, A Ward.	500	Do. ...	Do. ...	Do. ...
48. Latrines at Bullock Hospital, Sankli Road.	184	Do. ...	Do. ...	Do. ...
49. Latrines for grave-diggers' chal, Arthur Road.	200	Do. ...	Do. ...	Do. ...
50. Constructing a 12-chamber latrine at Worli Middlepakhadi.	3,010	Loan Works	Do. ...	Do. ...
51. Constructing a 12-chamber latrine at Worli Pakhadi.	2,240	Cur. rev....	Do. ...	Do. ...
52. Filling in compound of the Small-pox Hospital at Arthur Road and constructing a slab drain.	6,631	Do. ...	Do. ...	Do. ...
53. Paving and V-draining the van siding behind the sheep and cattle slaughter houses at Bandora.	9,330	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
20th Sept. 1891...	31st Mar. 1894...	9,489 0 0	Work was being executed departmentally, but was stopped for some time as the height of sewage in the sewers did not allow it to be carried out. The work will shortly be resumed.
1st Oct. 1891 ...	31st Dec. 1893 ...	3,102 1 5	Work entrusted to Messrs. Richardson & Cruddas and is in progress; the probable time of completion cannot be fixed.
5th July 1892 ...	31st July 1893...	5,904 0 6	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work is now in progress. The contract time was up on the 18th February 1893.
30th Nov. 1892...	.....	3,566 8 9	Work is being carried out departmentally and is nearly completed.
.....	.....	3,276 2 9	Work was stopped on account of monsoon, and will shortly be resumed.
.....	.....	.....	The work will shortly be taken in hand.
.....	.....	.....	Do. do. do.
.....	.....	.....	Tenders will shortly be invited for this work.
.....	.....	.....	The work has been entrusted to the petty works contractor.
.....	.....	.....	Plans and estimates are being prepared.
.....	.....	.....	An order has recently been given to the petty works contractor to do this work.
.....	.....	.....	Plans are being prepared.
.....	.....	.....	Work will be taken in hand shortly.
.....	.....	.....	Do. do. do.
.....	.....	.....	Detailed plan is being prepared.
.....	.....	.....	Work will be taken in hand shortly.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
III.—ROADS, BUILDINGS, &c.	Rs.			
WORKS COMPLETED.				
54. Chawl of 17 rooms at Love Grove ...	9,367	Cur. rev...	9th Feb. 1891 ...	1st Mar. 1891 ...
55. Night-soil depôt near the junction of DeLisle and Parbhadevi Roads.	26,394	Do. ...	25th Apr. 1888 ...	25th Apr. 1888 ...
56. Construction of Engineer's quarters at Love Grove pumping station.	12,009	Do. ..	Budget for 1892-93.	1st March 1892...
57. Retaining wall extension, Walkeshwar Road.	9,150 5,000	Do. ...	16th Jan. 1889 ...	16th Jan. 1889 ...
58. Reconstructing portion of Gibbs Road.	46,200	Sur. cash balance.	10th Nov. 1892...	10th Nov. 1892...
59. Filling in Municipal ground and building a retaining wall in front of house of Mr. Jaikisondas Gangadas at Walkeshwar Road.	4,743	Cur. rev...	Budget for 1892-93.	1st Mar. 1892 ...
60. Foras Road Market	50,000	Loan ...	17th April 1890...	25th Sept. 1890...
WORKS IN PROGRESS.				
61. Roads and streets in Agripada and elsewhere.	22,50,000	Do. ...	13th May 1889... 11th Jan. 1893...	13th May 1889 11th Jan. 1893
62. Halalkores' Chawls in Cursetji Suklaji's Street.	97,847	35 Lakhs Loan.	23rd Jan. 1890.	Nov. 1890 ...
63. Extension of the Mutton Markets, &c., Crawford Market.	49,942	Loan ...	26th Mar. 1888...	26th Mar. 1888 ...
64. Health Department stables n F and G Wards.	78,744	Do.	12246 / 16th Feb. 1893.	25th Sept. 1890
65. Chaukies for Depôt Mucadams, A-3, B-4, C-1, D-3, E-4, F-3, and G-3, in all 21, at Rs. 80 each.	1,680	Cur. rev....	Budget for 1893-94.	1 Mar. 1893 ...
WORKS TO BE COMMENCED.				
66. New Market at Colaba	50,300 50,000	Loan ...	26th Mar. 1888...	26th Mar. 1888 ...
67. Purchase of land for chawls for the biggaris who clean the Arthur Crawford Market and building the chawls	22,700	Do. ...	25th Apr. 1888 ...	25th Apr. 1888 ...

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
20th Feb. 1892 / March 1893	31st Aug. 1892 / July 1893	8,832 14 0	Work completed by Messrs. Gangaram Lakshman & Co., and accounts adjusted with the exception of those for the latrine.
13th May 1892...	10th Jan. 1893 ...	19,484 2 6	Work completed and final bill passed; some extra works proposed by the Health Officer are to be undertaken.
7th Nov. 1892...	8th Mar. 1893...	10,809 10 6	Work completed. Final accounts are to be adjusted.
14th Jan. 1892...	20th Mar. 1892...	12,664 1 10	Work completed. Accounts are to be adjusted.
1st Oct. 1892 ...	.....	27,271 6 0	Road slopes and catch-pit water channel completed. Parapet wall will be constructed if found necessary after the rains.
13th Feb. 1893...	13th June 1893 ...	8,126 15 10	Work which was entrusted to Mr. Lakhmidas Shamji has been completed. Accounts are to be adjusted.
5th July 1892...	10th Aug. 1893...	39,396 8 0	Work completed. Accounts are to be adjusted.
.....	.....	18,93,284 12 3	Lines of roads marked out and sanctioned. The land for the Agripada District is being gradually acquired. Sufficient area has been obtained and the construction of the streets will be taken in hand in due course. The extent of land to be acquired is large, and though the operation of acquisition is difficult, yet it is proceeding with all the expedition possible. Tenders for three roads have been accepted.
19th June 1891 ...	30th Oct. 1892 ...	86,494 13 4	Work completed. Compound wall being constructed. The work entrusted to annual repair contractor.
31st Oct, 1892 ...	15th Jan. 1894 ...	15,875 14 5	Work entrusted to Messrs. Jiwanji Dhunjibhoy & Co. Roof work in progress.
.....	.....	410 14 8	Tender of Messrs. Perozsha Dhunjibhoy Patel and Hormasji Jamasji Mistri has recently been accepted, and materials being collected.
23rd Sept. 1893...	31st Dec. 1893 ...	.....	Work in progress.
.....	.....	50,256 2 8	Site acquired and plans and estimates are in han
.....	.....	.....	It is proposed to build the chawls on the Municipal ground on the east of the Health Department bullock stables at Paltan Road. Tender of Messrs. Framroz has recently been accepted.

BOMBAY MUNICIPALITY.

Name and description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.—(*contd.*)				
WORKS TO BE COMMENCED—(*contd.*)				
68. Purchase of 11,838 sq. yds. of land at DeLisle and Arthur Roads Junction.	23,676	Loan ...	26th Mar. 1888 ...	26th Mar. 1888...
69. Road through Nowrojee Hill from Elphinstone Bridge to Dongri Street.	3,32,023	Do. ...	Do. ...	Do. ...
70. Extension of Bhuleshwar Market	4,50,000	Do. ...	9th July 1888...	9th July 1888 ...
71. Fencing Municipal ground at Dadar....	572	Cur. rev...	Budget for 1893-94.	1st Mar. 1893 ...
72. Health Department Bullock stables and quarters for sweepers.	1,50,000	25 Lacs Loan.	17th April 1890	25th Sept. 1890...
73. Health Department Biggaris' Chawl at Bori Bandar.	66,000	Loan ..	12246 16th Feb. 1893.	Do. ...
74. Making of streets which have become public under Municipal Act.	5,000	Cur. rev.,.	Budget for 1893-94.	1st March 1893...
75. Footbridge over the G. I. P. Railway at Byculla on the road from Parel Road to the Junction of DeLisle Road and Haines Road.	10,943	Do. ...	Do. ...	Do. ...
76. Construction of a road across Khandia Tank in extension of Khandia Street.	4,637	Do. ...	Do. ...	Do. ...
77. Fencing the ground of metal depôt at Sonapur.	2,000	Do. ...	Do. ...	Do. ...
78. Paving round the statuary and constructing ornamental wrought-iron fencing to the same in front of the New Municipal Building and constructing fencing with gates, walls, &c., on the north side of the private road to the north of the building.	7,276	Do. ...	Do. ...	Do. ...
FIRE BRIGADE STATIONS.				
WORKS IN PROGRESS.				
79. Fire Brigade Station, Fort	86,201	4½ Lacs Loan.	3rd Sept. 1891.	3rd Sept. 1891...
80. Fire Brigade Station, Babula Tank .....Rs. 36,569				
Filling in of Tank „ 21,716	58,285	Do. ...	Do. ...	Do. ...
81. Quarters for the Chief Inspector, Water Works ... Rs. 29,612				
Filling in Babula Tank (*a*) „ 21,026	50,638	Water Works Department.	3rd Sept. 1891 ...	3rd Sept. 1891 ...

(*a*) Out of this sum, Rs. 4,278 should be

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.	Remarks.
		Rs. a. p.	
.....	.....	.....	Owner unwilling to sell.
.....	.....	75 0 0	Negotiations at a standstill.
.....	.....	2,93,886 4 10	Land acquired; plans submitted to Government for approval.
.....	.....	.....	Under consideration.
.....	.....	.....	Do.
.....	.....	178 15 8	Tender of Messrs. Framroz has recently been accepted.
.....	.....	18 12 0	
.....	.....	.....	Amount made over to G. I. P. Railway Company for the construction.
.....	.....	63 3 3	Tender accepted.
.....	.....	.....	Under consideration.
.....	.....	.....	Tenders will be invited shortly.
11th Jan. 1893.	7th March 1894..	8,494 12 9	Contract entrusted to Messrs. Spencer & Co. Foundations and plinth completed. Superstructure in progress.
5th May 1893 ...	3rd June 1894 ...	432 12 0	Work of filling in entrusted to Mr. Sayaji Naguji. In progress.
Do. ...	Do. ...	4,857 10 1	Do. do. do.

charged to street improvement grant.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available
	Rs.			
FIRE BRIGADE STATIONS—(*contd.*)				
WORKS IN PROGRESS—(*contd.*)				
82. Ground at the junction of Kalbadevi and Bhuleshwar Rs.40,814				
Bhuleshwar Fire Brigade Station... ... ... „ 12,001	52,815	4½ Lacs Loan.	3rd Sept. 1891.	3rd Sept. 1891 ...
83. Sankli Tank Fire Bde. Stn. Rs. 1,07,905				
Filling in... ... ... „ 67,197				
Acquisition of land ... „ 33,104	2,08,206	Do. ...	Do. ...	Do. ...
84. Fire Brigade Station at Mazagon Pedder Market.	7,721	Do. ...	Do. ...	Do. ...
85. Fire Brigade Station at Dadar Rs. 8,208				
Filling in portion of Naigam Tank ... ... „ 2,194	10,402	Do. ...	Do. ...	Do. ...
86. Fire Brigade Station, Mahim Garden ...	6,564	Do. ...	Do. ...	Do. ...
87. Fire Brigade Station at DeLisle Road—				
Including the cost of making a road ... ... Rs. 14,276				
Cost of land ... ... „ 7,247				
Cost of filling in ... ... „ 6,503	28,026	Do. ...	Do. ...	Do. ...
WORKS TO BE COMMENCED.				
88. Fire Brigade Station, Colaba	26,468	Do. ...	Do. ...	Do. ...
89. Do. do. Gamdevi	8,273	Do. ...	Do. ...	Do. ...
90. Do. do. Chinchpokli.....	7,209	Do. ...	Do. ...	Do. ...
SANITARY & OTHER MISCELLANEOUS WORKS.				
WORK IN PROGRESS.				
91. Construction of a detached pork shop at the Pedder Market.	1,354	Cur. Rev.	Budget for 1893-94.	1st March 1893...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Sept. 1893.			REMARKS.
		Rs.	a.	p.	
11th Apr. 1893...	8th Nov. 1893...	2,071	3	2	Land acquired and work entrusted to Mr. Laksmidas Shamji; is in progress. Approaching completion.
14th Nov. 1892...	10th Nov. 1893...	48,131	4	8	Contract for filling up given to Mr. Sayaji Naguji. Nearly completed. The construction work will be undertaken when the filling is duly consolidated by the rains.
5th Jan. 1893....	29th Aug. 1893...	4,956	5	3	Completed; accounts to be adjusted.
21st Feb. 1893...	30th Apr. 1893...	1,848	15	1	Filling in completed.
25th Feb. 1893...	31st Oct. 1893 ...	2,558	5	8	Approaching completion.
7th Jan. 1893...	7th Oct. 1893 ...	15,673	15	7	Approaching completion.
.....	.....	391	0	0	Tender of Mr. Ruttonjee Bajonjee has been accepted.
.....	.....	66	4	0	Plans ready.
.....	.....	53	8	0	Do.
17th Sept. 1893...	17th Nov. 1893.	4	5	4	In progress.

BOMBAY MUNICIPALITY.

PROGRESS REPORTS UP TO THE END OF DECEMBER 1893

Under the Executive

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS.				
WORK COMPLETED.				
1. Repairs to Bhandarwada Reservoir additional work.	7,290	Cur. rev...	5th May 1893 ...	5th May 1893 ...
WORKS IN PROGRESS.				
2. Repairs to Tulsi main embankments...	22,000+13,000	Do. ...	14th Jan. 1892. 27th Jan. 1892.	14th Jan. 1892. 1st Mar. 1892.
3. Connections at Chinchpokli between Tansa and Vehar mains.	7,164	Loan	16th June 1892...	16th June 1892...
4. Earth filling and loose stone pitching in No. 4 Division.	805	Do.	23rd Feb. 1893...	23rd Feb. 1893...
5. Provision of fire buckets and hose for Municipal Markets.	6,203	Cur. rev...	23rd Jan. 1890. 6th Feb. 1893.	23rd Jan. 1890 6th Feb. 1893
6. Alteration of 22 dipping wells, &c.	4,163	Balance out of Budget for 1891-92 and previous one.	.....	.....
7. Dry rubble pitching on siphon No. 5 ...	4,600	Loan	23rd Feb. 1893 ...	23rd Feb. 1893...
8. Filling up to pipe embankment level a strip of land taken up for the pipe line at Coorla to store pipes.	2,640	Do. ...	Do. ...	Do. ...
9. Allowances for fixing gratings at siphon heads and tails.	250	Do. ...	Do. ...	Do. ...
10. Additional work, Ghatkopar bridge.....	1,600	Do. ...	Do. ...	Do. ...
WORKS TO BE COMMENCED.				
11. Covering storage basin at the Bhundarwada Reservoir and constructing filter over it.	44,500 1,15,500	Loan	14th Jan. 1892. 6th Feb. 1893.	14th Jan. 1892. 1st Mar. 1893.
	1,60,000			
12. Renewals of existing mains	1,00,000	Cur. rev...	30th Jan. 1893 ...	1st Mar. 1893 ...
13. Further alteration and improvements at the Malabar Hill Reservoir.	75,000	Loan	6th Feb. 1893...	Do. ...
14. Extension of water mains in various places.	30,000	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

OF NEW WORKS NOW IN COURSE OF CONSTRUCTION.

Engineer, Municipality.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1893.			Remarks.
		Rs.	a.	p.	
July 1893 ...	23rd July 1893 ...	6,222	5	11	Accounts to be adjusted.
15th Mar. 1892...	31st Jan. 1894 ...	22,574	11	4	Work in progress by contract with Messrs. Byramji Jehangir & Co.
July 1892...	31st Mar. 1894 ...	5,415	6	8	Work in progress departmentally.
Do. ...	31st May 1894 ...	224	0	2	Do. do.
Do. ...	Do. ...	1,419	6	0	Do. do.
May 1892 ...	30th June 1894...	2,200	9	2	Do. do.
July 1893 ...	Do. ...	496	7	0	Do. do.
30th Sep. 1893 ...	28th Feb. 1894...	1,744	9	5	Contract let to Messrs. Framji, Mahomedally & Co. Work in progress.
June 1893 ...	31st May 1894 ...	92	11	5	Work in progress departmentally.
Apr. 1893 ...	31st Mar. 1894 ...	1,065	0	0	Iron work fixed by Messrs. Richardson & Cruddas. Details of masonry under consideration.
Not commenced yet.	31st May 1895 ...	1,358	11	4	Contract drawings and papers ready.
Do. ...	31st July 1894 ...	.....			Pipes received ; list of places to be submitted.
Do. ...	30th Sept. 1894...	.....			Report on further works required submitted to the Municipal Commissioner.
Do. ...	30th June 1894...	.....			Pipes received ; tenders for laying will be obtained in January 1894.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
I.—WATER WORKS—*(contd.)*				
WORKS TO BE COMMENCED—(contd.)				
15. Masonry required at Ghatkopar clearing sluice.	2,500	Loan ...	23rd Feb. 1893 ...	23rd Feb. 1893 ...
16. Work at basis of cabins, say 16 @Rs.110	1,760	Do. ...	Do. ...	Do. ...
17. Renewing boundary marks	2,000	Do. ...	Do. ...	Do. ...
18. Ghatkopar strainers	12,000	Do. ...	Do. ...	Do. ...
19. Flooring Bassein bridge and culverts...	13,000	Do. ...	Do. ...	Do. ...
20. Widening embankment at Bassein Creek.	10,000	Do. ...	Do. ...	Do. ...
21. Memorial structure at Tansa.....	2,628	Do. ...	Do. ...	Do. ...
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS.				
WORKS COMPLETED.				
22. Queen's Road and Girgaum sewerage and house connection works.	11,14,929	Cur. rev...	28th July 1887 ...	28th July 1887...
23. Construction of a storm-water drain in Hornby Road from the Salvation Army Hall to Bazar Gate Street.	21,598	Loan ...	6th April 1892...	6th April 1892...
24. Construction of pipe sewers in Parel Village Main Road and Government House Road, Parel.	77,603	Do. ...	14th Jan. 1892 ...	14th Jan. 1892 ...
25. New latrines and urinals	(a) 22,344-15-11 +12,000-0-0 = 34,344-15-11	Cur. rev.	16th Oct. 1889 ...	16th Oct. 1889 ...

(a) Renewed grant ... ...
Add—Grant budgeted for 1892-93 ... ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1893.	Remarks.
		Rs. a. p.	
Not commenced yet.	31st May 1894 ...	.....	Details under consideration.
Do. ...	Do. ...	.....	Work sanctioned to be done departmentally.
Do. ...	Do. ...	.....	Number required being ascertained.
Do. ...	Do. ...	.....	Tender received 20th December 1893.
Do. ...	Do. ...	.....	Contract papers being prepared.
Do. ...	30th June 1894...	.....	Detailed drawings prepared and proposals submitted for work to be done.
Do. ...	Do. ...	.....	Drawings ready; tenders invited.
Nov. 1888...	12th May 1891...	8,89,089 0 0	Work entrusted to Messrs. Bulkley & Co. and completed on 12th May 1891. Final accounts with them are adjusted. Some portion is being carried out departmentally.
5th July 1892 ...	25th March 1893.	14,460 6 7	Messrs. Vishnu Narsingrao & Co.'s contract has been executed, and the work has been completed on the 25th March 1893. Final accounts are to be adjusted.
26th April 1892...	22nd Jan. 1893 ...	15,841 7 9	Work completed. Accounts are to be adjusted.
6th Dec. 1889 ...	.....	4,361 13 4	The work of construction of latrines and urinals in Bhajipala Road, Erskine Road, Jackaria Musjid and Dalal Street has been completed. The work of constructing latrines and urinals in Kennedy Sea Face Gardens, Custom House Road, Pultan Road, Jairajbhai Street and Musjid Road is in progress.
... ...			Rs. 22,344 15 11
... ...			„ 12,000 0 0
			Total Rs. 34,344 15 11

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)	Rs.			
WORKS COMPLETED—(*contd.*)				
26. Construction of engine and boiler house at Love Grove. Foundation of engines above 78·50 T. H. D. and the foundations of boilers; erection of machinery.	4,40,000	Loan	8th Sept. 1892 ...	8th Sept. 1892 ...
27. Filling and pitching slope of portion of Haines Road forming boundary of the storm-water reservoir.	4,888	Cur. rev...	16th Jan. 1889 ...	16th Jan. 1889 ...
28. Constructing pipe sewers and metal vent shafts in Parel village.	20,852	Loan ...	25th Feb. 1892 ...	25th Feb. 1892 ...
29. Experimental Drainage Works	10,000	Sur. cash balance.	8th Sept. 1892...	8th Sept. 1892...
30. Two square manholes on Queen's Road sewer.	600	Cur. rev...	Budget for 1893-94.	1st Mar. 1893 ...
31. Pipe sewer work at Curry Road ...	4,246	Loan ...	15th May 1893 ...	15th May 1893 ...
WORKS IN PROGRESS.				
32. House connections without privy fittings in the first section of Drainage Scheme.	(a) 5,78,611-14-4	Loan ...	8th Dec. 1881 ...	5th May 1885 ...
33. Automatic flushers at heads of gullies...	5,570	Do. ...	Do. ...	.....
34. Diverting pipe sewers along the site of the proposed overbridge at Falkland Road to allow the construction of the bridge.	10,338	Cur. rev...	28th Aug. 1890...	28th Aug. 1890...
35. House connections in Agripada District	2,48,642	Loan ...	8th Oct. 1888 ...	1st July 1890 ..
36. Arrangements for flushing Parel and Bellasis Road storm-water drain from Babula Tank and Nagpada Tank.	*4,295-10-1	Cur. rev...	23rd Jan. 1890 ...	1st Mar. 1890 ...

(a) House connections without privy fittings ... ...
Add—Transferred from Argyll Road, Standing Committee's Resolution No.

Less—Amount transferred to meet excess on Pumping Engines, Town Council's

* Budget grant ... ...
Add—Transferred from Item 12, Detailed Statement No. 12, Budget Estimate for 1892-93

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1893.	Remarks.
		Rs. a. p.	
10th Oct. 1892 ...	1st June 1893...	4,48,280 9 4	The work completed and the accounts are being adjusted.
.....	.....	1,207 10 8	Work completed; accounts are to be adjusted.
5th July 1892 ...	31st Oct. 1893 ...	6,832 0 3	Work completed and accounts are to be adjusted.
30th Nov. 1892...	.....	7,689 9 7	Work was carried out departmentally and is completed, but the Standing Committee have subsequently sanctioned some experiments to be carried out in Municipal Workshops on suggestion of Mr. Wallace.
21st Oct. 1893 ...	15th Nov. 1893 ...	322 0 1	Work completed ; accounts are to be adjusted.
3rd Aug. 1893...	26th Oct. 1893 ...	2,980 9 7	Do. do. do.
{ 8th Jan. 1887. / 25th Jan. 1892.	31st July 1888 / 31st July 1893	2,36,083 0 0	Khetwadi section of the work is done ; other portions in progress.
Do. ...	Do. ...	.....	Work ordered to be proceeded with departmentally, but stopped pending decision of Corporation as regards house-connections in general.
1st Nov. 1890 ...	.....	5,443 0 2	The work is in progress.
20th Oct. 1890 ...	15th Oct. 1892 ...	2,23,143 12 7	The whole of the contract work was completed before 30th September 1892, except connections to two houses and five vent shafts. House connection work is stopped in accordance with Corporation's Resolution No. 3142, dated 30th June 1892.
21st Apr. 1891...	.....	3,224 2 6	The work at Nagpada Tank is stopped as the tank is proposed to be filled up.

... ... 5192, dated 20th June 1888	Rs. 5,71,165 0 0 „ 19,046 14 4
	Rs. 5,90,211 14 4
Resolution No. 52, dated 13th January 1882	„ —11,600 0 0
	Rs. 5,78,611 14 4
... ...	Rs. 3,844 0 0
... ...	„ 451 10 1
	Total...Rs. 4,295 10 1

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
II.—SEWERAGE, SURFACE DRAINAGE AND HOUSE CONNECTIONS—(*contd.*)				
WORKS IN PROGRESS.—(*contd.*)				
37. Construction of sewer flushing arrangements.	14,000	Loan	23rd Jan. 1890 ...	1st Mar. 1890 ...
38. Closing up with cast-iron the perforations in manhole covers.	4,000	Cur. rev...	9th Feb. 1891...	1st Mar. 1891 ...
39. Engraving numbers on manhole covers	290	Do. ...	Budget for 1893-94.	1st Mar. 1893 ...
40. Construction of a chowki for the Chief Inspector of Drains at Foras Road.	2,474	Do. ...	Do. ...	Do. ...
41. Latrines at Bullock Hospital, Sankli Road.	184	Do. ...	Do. ...	Do. ...
WORKS TO BE COMMENCED.				
42. Erecting metal vent shafts in Abdool Rahimon Street.	2,077	Do. ...	Do. ...	Do. ...
43. Providing latrine and urinal to the Engineer's office, A Ward.	500	Do. ...	Do. ...	Do. ...
44. Latrines for grave diggers' chawl, Arthur Road.	200	Do. ...	Do. ...	Do. ...
45. Constructing a 12-chamber latrine at Worli Middlepakhadi.	3,010	Loan Works.	Do. ...	Do. ...
46. Constructing a 12-chamber latrine at Worli Pakhadi.	2,240	Cur. rev....	Do. ...	Do. ...
47. Filling in compound of the Small-pox Hospital at Arthur Road and constructing a slab drain.	6,631	Do. ...	Do. ...	Do. ...
48. Paving and V-draining the van siding behind the sheep and cattle slaughter houses at Bandora.	9,830	Do. ...	Do. ...	Do. ...
III.—ROADS, BUILDINGS, &c.				
WORKS COMPLETED.				
49. Chawl of 17 rooms at Love Grove ...	9,367	Cur. rev....	9th Feb. 1891 ...	1st Mar. 1891 ...
50. Night-soil depôt near the junction of DeLisle and Parbhadevi Roads.	26,394	Do. ...	25th Apr. 1888 ...	25th Apr. 1888 ...
51. Construction of Engineer's quarters at Love Grove pumping station.	12,009	Do. ...	Budget for 1892-93.	1st March 1892...

APPENDICES TO RECORD.

Date of commencement of the work.	Probable Date of completion of the work.	Certified Expenditure up to the end of December 1893.	Remarks.
		Rs. a. p.	
20th Sept. 1891...	31st Mar. 1894 ...	10,172 12 9	Work in progress.
1st Oct. 1891 ...	31st Dec. 1893 ...	3,865 11 5	Work nearly completed.
1st Dec. 1893 ...	.....	21 8 0	Work in progress.
.....	.....	.....	Do. do.
.....	.....	.....	Do. do.
.....	.....	.....	Work entrusted to the petty works contractor.
.....	.....	.....	Estimates being prepared, and will be shortly submitted.
.....	.....	.....	The matter has been deferred as per Health Officer's No. 23689 of 14th November 1893.
.....	.....	.....	Design of latrines altered and estimates being prepared according to the altered design.
.....	.....	.....	Work will be taken in hand shortly.
.....	.....	.....	Plans and estimates are being prepared.
.....	.....	.....	A contract form is being prepared and tenders will be shortly invited.
20th Feb. 1892...	31st Aug. 1892 ...	8,832 14 0	Work completed by Messrs. Gangaram Lakshman & Co., and accounts adjusted with the exception of those for the latrine.
13th May 1892 ...	10th Jan. 1893 ...	19,481 2 6	Work completed and accounts adjusted ; some extra works proposed by the Health Officer are to be undertaken.
7th Nov. 1892...	8th Mar. 1893...	10,809 10 6	Work completed. Final accounts are to be adjusted.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.—(*contd.*)				
WORKS COMPLETED—(*contd.*)				
52. Retaining wall extension, Walkeshwar Road.	9,150 5,000	Cur. rev.	16th Jan. 1889..	16th Jan. 1889 ...
53. Reconstructing portion of Gibbs Road..	46,200	Sur. cash balance.	10th Nov. 1892 ...	10th Nov. 1892...
54. Filling in Municipal ground and building a retaining wall in front of house of Mr. Jaikisondas Gangadas at Walkeshwar Road.	4,743	Cur. rev....	Budget for 1892-93.	1st Mar. 1892 ...
55. Foras Road Market	50,000	Loan ...	17th Apr. 1890 ...	25th Sept. 1890...
56. Halalkores' Chawls in Cursetji Suklaji's Street.	97,847	35 Lakhs Loan.	23rd Jan. 1890	Nov. 1890...
57. Ground at the junction of Kalbadevi and Bhuleshwar Rs. 40,814 Bhuleshwar Fire Brigade Station ... ... „ 12,001	52,815	4½ Lakhs Loan.	3rd Sept. 1891.	3rd Sept. 1891 ...
58. Fire Brigade Station at Mazagon Pedder Market.	7,721	Do. ...	Do. ...	Do. ...
59. Fire Brigade Station, Mahim Garden...	6,564	Do. ...	Do. ...	Do. ...
60. Fire Brigade Station at DeLisle Road— Including the cost of making a road ... ... Rs. 14,276 Cost of land ... ... „ 7,247 Cost of filling in ... ... „ 6,503	28,026	Do. ...	Do. ...	Do. ...
61. Construction of a detached pork shop at the Pedder Market.	1,354	Cur. rev....	Budget for 1893-94.	1st March 1893...
62. Extension of the Mutton Markets, &c., Crawford Market.	49,942	Loan ...	26th Mar. 1888..	26th Mar. 1888...
63. Chankies for Depôt Mucadams, A-8, B-4, C-1, D-3, E-4, F-3, and G-3, in all 21, at Rs. 80 each.	1,680	Cur. rev....	Budget for 1893-94.	1st Mar. 1893 ..

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1898.	Remarks.
		Rs. a. p.	
14th Jan. 1892 ...	20th Mar. 1892...	12,654 1 10	Work completed. Accounts are to be adjusted.
1st Oct. 1892 ...	.....	27,271 6 0	Road slopes and catch-pit water channel completed. Parapet wall will be constructed if found necessary after the rains.
13th Feb. 1893 ...	13th June 1893...	3,126 15 10	Work which was entrusted to Mr. Lakhmidas Shamji has been completed. Accounts are to be adjusted.
5th July 1892 ...	10th Aug. 1893...	39,880 12 7	Work completed. Accounts are to be adjusted.
19th June 1891 ...	30th Oct. 1892 ...	86,491 13 4	Work completed.
11th Apr. 1893 ...	8th Dec. 1893 ...	7,199 10 9	Completed; accounts being closed.
5th Jan. 1893 ...	29th Aug. 1893...	7,201 0 6	Completed; accounts to be adjusted.
25th Feb. 1893 ...	30th Nov. 1893...	6,825 5 6	Completed; accounts being closed.
7th Jan. 1893 ...	31st Dec. 1893 ...	15,673 15 7	Do. do.
17th Sept. 1893...	17th Nov. 1893 ...	9 13 1	Completed. Accounts are to be adjusted.
31st Oct. 1892 ...	15th Jan. 1894 ...	23,418 0 6	Work approaching completion.
23rd Sept. 1893...	31st Dec. 1893 ...	1,040 0 0	Do. do.

BOMBAY MUNICIPALITY.

Name and Description of Work or Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by Corporation.	Date when Grant became available.
III.—ROADS, BUILDINGS, &c.—(*contd.*)	Rs.			
WORKS IN PROGRESS.				
64. Roads and streets in Agripada and elsewhere.	22,50,000	Loan ...	13th May 1889 ... 11th Jan. 1893...	13th May 1889 11th Jan. 1893
65. Construction of a road across Khandia Tank in extension of Khandia Street.	4,637	Cur. rev....	Budget for 1893-94.	1st Mar. 1893 ...
66. Making of streets which have become public under Municipal Act.	5,000	Do. ...	Do. ...	Do. ...
67. Health Department Stables in F and G Wards.	78,744	Loan ...	12246 / 16th Feb. 1893.	25th Sept. 1890
68. Paving round the statuary and constructing ornamental wrought-iron fencing to the same in front of the New Municipal Building and constructing fencing with gates, walls, &c., on the north side of the private road to the north of the building.	7,276	Cur. rev....	Budget for 1893-94.	1st March 1893...
69. Fire Brigade Station, Fort.....	36,201	4½ Lakhs Loan.	3rd Sept. 1891.	3rd Sept. 1891...
70. Fire Brigade Station, Babula Tank .....Rs. 36,569				
Filling in of Tank „ 21,716	58,285	Do. ...	Do. ...	Do. ...
71. Quarters for the Chief Inspector, Water Works ... Rs. 29,612				
Filling in Babula Tank (*a*) „ 21,026	50,638	Water Works Department.	Do. ...	Do.. ...
72. Sankli Tank Fire Bde. Stn. Rs. 1,07,905				
Filling in ... ... „ 67,197				
Acquisition of land ... „ 33,104	2,08,206	4½ Lakhs Loan.	Do. ..	Do. ...
73. Fire Brigade Station at Dadar Rs. 8,208				
Filling in portion of Naigam Tank ... ... „ 2,194	10,402	Do. ...	Do. ...	Do. ...
74. Fire Brigade Station, Colaba	26,468	Do. ...	Do. ...	Do. ...
75. Sheep and Goat Market at DeLisle Road.	16,000	Surplus Cash Balance.	7th Sept. 1893	7th Sept. 1893...
76. Bullock Shed at Bandora Slaughter House.	1,950	Loan ...	12th June 1893...	12th June 1893...
77. A cage for two Kathiawar Lions ...	5,046	Surplus Cash Balance Rs. 2,546	7th Sept. 1893...	7th Sept. 1893 ...

(*a*) Out of this sum, Rs. 4,278 should be

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1893.	REMARKS.
		Rs. a. p.	
.....	.....	19,08,622 7 2	Four roads are in progress, *viz.*, Club Road, Morland Road, Souter Road, Gilder Street.
18th Oct. 1893 ...	17th Jan. 1894 ...	110 8 3	In progress.
.....	.....	72 0 3	Do.
18th Oct. 1893 ...	31st July 1894 ...	11,615 0 1	Work in progress.
6th Dec. 1893...	7th March 1894.	49 8 0	In progress.
11th Jan. 1893...	Do. ...	14,294 10 8	Work in progress.
5th May 1893 ...	3rd June 1894...	432 12 0	Work of filling in tank in progress.
Do. ...	Do. ...	7,053 14 2	Do. do. do.
14th Nov. 1892...	10th Nov. 1893...	59,608 12 2	Filling in completed. The construction work will be undertaken when the filling is well consolidated by rain.
21st Feb. 1893 ...	30th April 1893...	1,848 15 1	Filling in completed.
30th Oct. 1893 ...	30th April 1894...	591 0 0	Work in progress.
12th Dec. 1893 ...	12th June 1894...	60 0 0	Work will shortly be commenced.
.....	.....	30 0 0	In progress.
15th Nov. 1893...	15th Feb. 1894...	.....	Do.

charged to Street Improvement Grant.

BOMBAY MUNICIPALITY.

Name and Description or Work of Grant.	Amount of Grant.	Fund to which Grant is debitable.	Date when Grant was sanctioned by the Corporation.	Date when Grant became available.
	Rs.			
III.—ROADS, BUILDINGS, &c.—*(contd.)*				
WORKS TO BE COMMENCED.				
78. New Market at Colaba	50,300 50,000	Loan ...	26th Mar. 1888 ...	26th Mar. 1888...
79. Purchase of land for chawls for the biggaris who clean the Arthur Crawford Market and building the chawls.	22,700	Loan ...	25th Apr. 1888 ...	25th Apr. 1888 ...
80. Health Department Biggaris' Chawl at Bori Bandar.	66,000	Do. ...	1224G / 16th Feb. 1893.	25th Sept. 1890...
81. Footbridge over the G. I. P. Railway at Byculla on the road from Parel Road to the Junction of DeLisle Road and Haines Road.	10,943	Cur. rev....	Budget for 1893-94.	1st Mar. 1893 ...
82. Fire Brigade Station, Gamdevi ...	8,273	4½ Lakhs Loan.	3rd Sept. 1891	3rd Sept. 1891...
83. Do. do. Chinchpokli ...	7,209	Do. ...	Do. ...	Do. ...
84. Extension of Bhuleshwar Market ...	4,50,000	Loan ...	9th July 1888 ...	9th July 1888 ...
85. Health Department Bullock stables and quarters for sweepers.	1,50,000	35 Lakhs Loan.	17th April 1890	25th Sept. 1890...
86. Purchase of 11,838 sq. yds. of land at DeLisle and Arthur Roads Junction.	23,676	Loan ...	26th Mar. 1888 ...	26th Mar. 1888 ...
87. Road through Nowrojee Hill from Elphinstone Bridge to Dongri Street.	3,32,023	Do. ...	Do. ...	Do. ...
88. Fencing Municipal ground at Dadar ..	572	Cur. rev....	Budget for 1893-94.	1st Mar. 1893 ...
89. Fencing the ground of metal depôt at Sonapur.	2,000	Do. ...	Do. ...	Do. ...

APPENDICES TO RECORD.

Date of commencement of the Work.	Probable Date of completion of the Work.	Certified Expenditure up to the end of Dec. 1893.	Remarks.
		Rs. a p.	
.....	.....	50,256 2 8	Tenders invited.
.....	.....	.....	It is proposed to build the chawls on the Municipal ground on the east of the Health Department bullock stables at Paltan Road.
.....	.....	463 14 8	Tender of Messrs. Framroz & Co. has recently been accepted. Work cannot be commenced until the existing chawls are vacated by the Health Department.
109 4 3	.....	109 4 3	Amount made over to G. I. P. Railway Company for the construction.
.....	.....	66 4 0	Plans ready.
.....	.....	53 8 0	Revised plans being prepared.
.....	.....	2,94,202 6 2	Land acquired. Plans submitted to Government for approval.
.....	.....	.....	Under consideration.
.....	.....	.....	Owner unwilling to sell.
.....	.....	75 0 0	Negotiations at a standstill.
.....	.....	.....	Under consideration.
.....	.....	.....	Do.

Appendix E.

EXPERIMENTAL HOUSE CONNECTIONS.

No. 21791 OF 1893-94.

BOMBAY, 23*rd October* 1893.

To THE MUNICIPAL COMMISSIONER.

SIR,—I have the honour to submit the following report on the different systems for connecting buildings with sewers—or in other words, house connections—which have been tried as experiments. It is not necessary for me to describe each system, nor to describe in detail the design contemplated and exhibited in each system. After I have described the impressions that the inspection of each system has left on my mind, I will make a few remarks on the objects which, it appears to me a system of house connections, ought to serve and which ought to be kept in mind in constructing a system. I will now only say that it is impracticable and hopeless in my opinion to have one system of house connections for all dwellings—great and small, well appointed and ill-appointed—the palace and the hut for all classes, rich and poor, the opulent and the impoverished. Five systems of house connections have been constructed, and 1 system is being finished. They are—

No. 1—Mr. J. W. Smith's modified design No. 1.
No. 2—Mr. J. W. Smith's modified design No. 2.
No. 3—Mr. Gostling's suggestions.
No. 4—Mr. Hewson's suggestions (without a house gully).
No. 5—Mr. Hewson's suggestions (with a house gully).
No. 6—Mr. Wallace's suggestions.

No. 1—Mr. J. W. Smith's modified design No. 1.

	Locality.	Names of House-owners.
House gully between Nos. 254 and 256.	Lohar Street ...	Mr. Gangadhar Shastri and Ramji Hirji Fruitwalla.

This system has two distinct modifications of the present system. Over each cistern head there is a guard or cap through which the

down-take pipe passes; this will have the effect of preventing leaves, or refuse, thrown out of windows, falling into the cistern head, but will not have the effect of preventing leaves or refuse passing down the pipe into the cistern head. Each pipe curving discharges into an iron trough in which is a chamber from which is an overflow into a gully trap. I do not look on this trough as an improvement.

No. 2—Mr. J. W. Smith's modified design No. 2

	Locality.	Names of House-owners.
House gully between Nos. 218 and 220.	Lohar Street ...	Mr. Dhondiraj Vinayek Biwalkar and Mr. Runchord Dayal.

This system, so far as the contrivances outside the building, are concerned, is a slight improvement on the present system, nevertheless the gully traps are too small and the pipes are too low in the traps. But as to the system inside the building, I cannot approve of it. Catch-pits have been placed inside the rooms. I consider this system dangerous. We know how foul even the finest earthenware becomes, when used as a receptacle for foul liquids. The catch-pit will be a cesspool, and the cesspool will be in the most dangerous position; it can be in, not only inside the building, but inside the sleeping room.

No. 3—Mr. Gostling's suggestions.

	Locality.	Names of House-owners.
House gully in connection with Nos. 15—25 and 338—348	Vithalwady and Shaik Memon Street.	Messrs. Manekchand Poonachand Goculdas Morarji and Sobhagchand Talakchand and Bai Harkabai and Goculdas Morarji.

On two occasions I observed a very strong smell of sewer gas on entering the building; there was a smell of sewer gas all around and a smell of sewer gas also outside in the gully; one gully trap was blocked by bits of vegetable and slices of pumpkin and fruit refuse, and one waste-water pipe was choked. The ground floor passage inside house No. 342, Shaik Memon Street, was in a filthy state, and there was night-soil on this passage.

I can see no advantage in this system over the present system. I can see many disadvantages.

No. 4—Mr. Hewson's suggestions (without a house gully).

	Locality.	Names of House-owners.
Nos. 258 and 266 ...	Bazar Gate Street...	Mr. Kanji Khetsey.

I had to take a lamp to inspect the system. I made an inspection at night as well as during the day. Privy seats on the first, second and third floors covered with night-soil, so that they cannot be used. This is not the fault of the system. Ventilating shaft under verandah ; people complain of the smell from this shaft. There is from this system a cesspool inside the house, the smell of which is concentrated and carried up in front of a verandah. I cannot approve of this system. It is wrong, I hold, to construct a cesspool inside a building. The system would only be right in a few special cases.

No. 5—Mr. Hewson's suggestions (with a house gully.)

	Locality.	Names of House-owners.
House gully in connection with Nos. 183-185.	Modi Street ...	Mr. Kanji Khetsey.

Inspected twice ; work not completed.

No. 6—Mr. Wallace's suggestions.

	Locality.	Names of House-owners.
House gully between Nos. 239-245.	Shaik Memon Street	Mr. Jaikisondas Vijbhukandas and Mr. Tribhowandas Bhaichand.

Underneath each pipe is an intercepting chamber or cesspool. The cesspool water is above the end of the pipe in some cases, *i.e.*, the end of the pipe is in many cases in the cesspool water. The cesspools are brought under rooms. This does not, I think, fulfil the ideas which Mr. Wallace clearly put in his evidence. The ideas which Mr. Wallace indicated in his evidence embodied sound sanitary principles which it was not possible to controvert. Mr. Wallace recommended a system to prevent foul air from entering houses. This is a system to carry foul air into houses.

Having now considered each system, I can proceed to state the general opinion I have come to. That opinion is this :—

That the only slight improvement over the present system of house connection is in the guard over the cistern head ; that four out of the six systems are more or less dangerous, for they embody the dangerous principle of stagnation or interruption in the sewage.

The only system, a system of open channels leading to catch-pits which embodies the views I urged before the Committee of the Corporation, has been constructed at the Halalkhor chawls in Cursetji Suklaji Street. That system has not been included in the list. In my letter No. 15485, dated 5th September 1892, to the Secretary of the Corporation I wrote :—

"In reference to your letter No. 5864 of the 3rd instant, which I "acknowledge with thanks, I have the honour to inform you that

"I do not think it is necessary for me to submit any definite "'schedule.' My proposal is shown in the model except in so far "that the gully should discharge into a catch-pit not less than "12×12 and not into a trap of the form at the end of the model."

The population for house connection purposes may be broadly classified into two divisions—the classes who eat on plates and the classes who eat on leaves. This is, from a sanitary point of view, the great distinction in the population. The requirements of each class have to be considered. I do not think that a system of horizontal pipes should be placed to any dwelling in which the people use leaves for domestic purposes.

It must be taken as a practical fact that the people who use leaves will throw them out of the windows or from the back of the house into the gullies below. Just as it must be taken as a practical fact that in each cook-room of the classes who employ servants, cuttings from vegetables and feathers and refuse will be put into the pipes leading from the cook-room; even in buildings occupied by Europeans, it is so; the servants in the cook-rooms do this as we see in buildings in the Fort.

The other great distinction is between the rich and the poor. It has always seemed to me that the placing of pipes and an expensive system of house drainage to a hut or a chawl occupied by the poor was calculated to bring scientific drainage into ridicule.

As I have stated already, I do not think any one system of house connections should be adopted.

The system should be modified according to the views of the Engineer Mr. Smith, acting, if necessary, after consultation with the Health Officer and the wishes of the people themselves. I think in many cases the wishes of the people who have to use house connections ought as far as possible to be consulted.

In conclusion, I may express a hope that I shall at a convenient opportunity be given leave to inspect and report on the systems of house drainage in Calcutta, Rangoon and Madras.—I have, &c.,

T. S. WEIR, Health Officer.

No. 16226 OF 10*th November* 1893.

Copy forwarded to the Municipal Secretary, with reference to his letter No. 4299, dated 4th August last, for the information of the Committee.

H. A. ACWORTH, Municipal Commissioner
for the City of Bombay.

If the Secretary will kindly have this report printed and copies furnished to each member of the Committee and also to the Engineers concerned, and will inform the President when he has done so, a meeting of the Committee will be called and the professional gentlemen, whose schemes of house connections have been carried out, will be invited to be present.

THOMAS BLANEY.

APPENDICES.

24th November 1893.

That the work of constructing house-connections in the City be stayed till the Corporation have enquired into the sanitary effect of those already constructed. That a Committee composed of the following gentlemen be appointed for the purpose of enquiring into the sanitary effect of the house-connections already constructed and of reporting thereon, and of suggesting such remedies as may appear desirable or necessary: ABDALLA M. DHARAMSI, Esq.; ARDASIR D. MODY, Esq.; Lt.-Col.-BRIG.-SURG. S. O'B. BANKS; BHALCHANDRA K. BHATAWADEKAR, Esq.; THOMAS BLANEY, Esq.; COWASJEE HORMUSJEE, Esq.; COWASJEE PESTONJEE, Esq.; D. A. D'MONTE, Esq.; FURDUNJI N. BISNI, Esq.; FRAMJI D. DIVECHA, Esq.; W. C. HUGHES, Esq.; K. N. KABRAJEE, Esq.; Lt.-Col.-BRIG.-SURG. G. A. MACONACHIE; MEHERJIBHAI R. SETNA, Esq.; MUNCHERJI C. MURZBAN, Esq.; NANABHOY N. KATRAK, Esq.; PHEROZESHAH M. MEHTA, Esq.; ACCACIO G. VIEGAS, Esq.; R. M. SAYANI, Esq.; The MUNICIPAL COMMISSIONER.

That the Committee be empowered to call for papers or to take evidence. Six to form a quorum and the President to be Chairman.

At a meeting of the Committee of the Corporation, as per margin, appointed on the 30th June 1892 held this day, there were present:—The Hon'ble Mr. Javerilal U. Yajnik, Chairman; Ardasir D. Mody, Esq.; Bhalchandra K. Bhatavadekar, Esq.; Thomas Blaney, Esq.; Cowasjee Pestonjee, Esq.; Furdunji N. Bisni, Esq.; Kaikhosru N. Kabraji, Esq.; Nanabhai N. Katrak, Esq.; A. G. Viegas, Esq.

The Commissioner; the Health Officer; the Executive Engineer; the Special Drainage Engineer; the Drainage Engineer; and the Secretary. Mr. J. Wallace and Mr. J. Hewson were also present.

Mr. Blaney: Should not the Health Officer be asked to be present? The business we should first take in hand is the discussion of his report.

The President: Very good.

(The Health Officer, having been informed, attended.)

Mr. Blaney: I may take this opportunity of informing the Committee that Mr. Gostling, not knowing I was not the President of this Committee, addressed a letter to me asking that this meeting be deferred. As I really called the meeting, I replied that the notices had gone out, and as the Committee was so large a one and involved the attendance of Municipal Officers, I was not able to comply with the request. He thereupon sent me another communication, in which he made rather an extraordinary demand. Perhaps Mr. Barrow will read the correspondence.

The Secretary then read the following:—

BOMBAY, 20*th November* 1893.

MY DEAR BLANEY,

I enclose for your information press-copy of letter I have to-day addressed to Barrow on the subject of the postponement of the meeting of the House Connections Committee.

You will have plenty of work to do without taking up my proposal.

I shall be satisfied if you do not discuss, or inspect, or come to a decision in my absence upon the House Connections I have made in Vithalwadi.—Yours sincerely, D. GOSTLING.

BOMBAY, 20*th November* 1893.

H. W. BARROW, ESQ.

DEAR SIR,

House Connections Committee.

I am in receipt, on the 17th instant, of your letter of the 16th instant.

I go up-country on urgent business on Tuesday, 21st instant, and do not expect to return to Bombay till the 4th proximo.

I should be much obliged by your postponing the meeting of the Committee until my return.

If that cannot be done, I beg that the Committee will not discuss, or inspect, or come to a decision in my absence upon the House Connections made under my superintendence in Vithalwadi.—Yours truly, D. GOSTLING.

Read also the following :—

21*st November* 1893.

DR. T. S. BLANEY,

Chairman, Drainage Committee, Bombay Corporation.

SIR,—I have the honor to point out that Dr. Weir's report, No. 21791 of 23rd October 1893, on my suggestions (without a house gully) is not quite correct. The ventilating shaft is not under a verandah, but outside the house and is 52′ 9″ high. There is no cesspool inside the house, but a catch-pit at the bottom of the ventilating shaft. There are five privy connections and 42 sullage connections discharging into one siphon trap at the bottom of the ventilating shaft. I think it important to bring to your notice that the privies worked for three days in July without water (consequent to a burst in the main).—I have, &c., JOHN HEWSON, A.M.I.C.E.

The letters were recorded.

Mr. Blaney : As this meeting has been assembled to receive the report of the Health Officer on the experimental House Connections made at the instigation of this Committee, I think our first business is to consider the report, and if the Committee agree with me, we had better take the experiments in order, read the Health Officer's remarks, and then discuss each in turn.

The Chairman : That will be the most suitable plan.

Mr. Nanabhai N. Katrak : I think Mr. Gostling's experiment might be taken at the end.

This course was agreed to.

APPENDICES.

MR. SMITH'S MODIFIED DESIGNS 1 & 2.

Examination of the Health Officer by Mr. Blaney.

Q.—Do I understand from the Health Officer that the arrangement, which at our former meeting was called a "catchpit" for receiving and preventing the onflow of solid matter, is the same as he now calls a "cesspool"? *A.*—This is really a siphon or catchpit.

Q.—That is what you call a "cesspool"? *A.*—It serves the same purpose.

Q.—Is it the same though? *A.*—I think so; practically yes.

Q.—When we were considering this matter before, Dr. Weir, it was supposed that catchpits were always to be in the gully outside the house. That was the principle on which this catchpit question was discussed by this Committee? *A.*—I think so.

Q.—Now we find then, that in Mr. Smith's experiments this catchpit arrangement is inside?

The Commissioner: It is not a catchpit; it is a siphon, a trap.

Mr. Blaney: Call it what you like—a victoria bend.

The Commissioner: If you called a buggy a "victoria," you would not be defining it properly;—it is a siphon.

Q.—You say the trap is capable of giving off deleterious gases, and as it is inside the building, it will be harmful to public health and is therefore not to be recommended? *A.*—I consider the system dangerous.

Mr. Blaney: What I suggest is that the Committee should not come to a conclusion and decide between Mr. Smith's experiment and the Health Officer now. The Committee will have an opportunity of seeing this experimental drain in Lohar Chawl and can then come to a conclusion. We must discuss the schemes without coming to any conclusions. If we were to go to the experiments and discuss them there, we should have only half the available information.

The Chairman: Could not you go and see the experiments and then discuss this report.

Mr. Blaney: We have got all this information, and if we discuss it, we shall be able to carry it in our minds when we see the experiments.

Examination of Mr. James W. Smith by Mr. Nanabhai N. Katrak.

Q.—What is the capacity of the trap in the *nahani*? *A.*—Less than half a gallon. *Q.*—In one of these experiments we advised that a pipe of 4″ be used; on which is it? *A.*—Mr. Hewson's as applied to a house in Modi Cross Lane; in this particular case in Lohar Street 3″ pipes have been used.

Q.—Here, I understand, the pipe is continuous and there is no cistern head? *A.*—There is no cistern head in my Design No. 2.

Q.—Is there any break between the *nahani* and the outside pipe; it is a continuous one? *A.*—Yes. *Q.*—If it gets blocked up at the junction between this and the other pipe, what means have we of clearing it out? *A.*—The plunger. *Q.*—This cistern head in your Design No. 1 has a cap on? *A.*—Yes. *Q.*—What is it

made of? *A.*—Cast-iron, perforated. *Q.*—It might become sealed? *A.*—It is very unlikely, unless after the lapse of many years of neglect; the holes are ¾" in diameter. *Q.*—If the guard became blocked up by a big leaf, would it not have the effect of preventing decomposition going on by the action of the sun and light? *A.*—If the leaf remained there and was not disturbed by the winds, of course the cap, if the leaf were large enough, would be stopped. The cap is domical in shape and a leaf would fall off. *Q.*—My question is, would not the liquid in the trough lose the influence of the light and air and thus make matters worse? *A.*—The troughs have nothing to do with the caps on the cistern heads.

Q.—They pass light and air? *A.*—It can go in quite independent of the cap. *Q.*—"Each pipe curving discharges into an iron trough in which is a chamber from which is an overflow into a gully trap." I do not understand that; will you kindly explain?

Mr. Blaney: The trough is outside of the house?

Mr. Smith: Yes. I said the holes in the cap were ¾", they are really ½".

The Commissioner: I should like to ask a few questions with reference to No. 2. I am referring to the trap in the *nahani*. Would it not be an improvement to have one of the stones Mr. Wallace spoke of to shove to and fro over the top of the entrance to the siphon?

Mr. Smith: I think so.

The Commissioner: It occurred to me that we might combine the two things. I saw Mr. Wallace's stone, but it appeared to me to be too thick.

Mr. Smith: The stone must cover the grating.

The Commissioner: It might be a less thickness than 2".

Mr. Blaney: People want them pretty thick here.

The Commissioner: Not too thick to move. I think ¾" is enough. It occurred to me it might be an improvement in your *nahani*, Mr. Smith?

Mr. Smith: Yes; but I think a stone 1" in thickness would be too thin.

The Commissioner: Do you think so; they would not throw it at each other.

Mr. Nanabhai N. Katrak: Would not an iron lid do.?

Mr. Smith: Yes.

Mr. Blaney: The question is this: would this arrangement effectually remove the objections urged against the system?

The Health Officer: My objection is that it is wrong on sanitary grounds. If there is a catchpit in which sewage is collected inside a building, it is wrong on sanitary grounds.

The Commissioner: Inside a sleeping room?

The Health Officer: Still more than in any other room.

The Commissioner: Every house in England has a siphon either in the kitchen or scullery; water-closets have siphons, so have

washing basins. In Bombay there are a great many buildings with water-closets: the clubs and these offices for instance.

Mr. Blaney: But we have to consider the middle and lower classes?

The Commissioner: That is so, and we have to consider the conditions of life in Bombay. I understand the sanitary principle Dr. Weir maintains is equally applicable over the whole world. Would you abolish siphons which are attached to water closets, Dr. Weir?

The Health Officer: As a general rule I condemn siphons. The reason I have given is that with a siphon there is a collection of fluids, which must be more or less impure.

The Commissioner: Then you would condemn siphon sinks and so on?

The Health Officer: Yes, as a general rule. The only condition under which a siphon is justifiable is when you have a constant flow of pure matter replacing the foul water.

The Commissioner: Water flowing from a sink or bath sealing the siphon is always more or less impure.

The Health Officer: Yes, even in water-closets, where there is a constant flow of fresh water displacing the night soil, the siphons often become offensive.

The Commissioner: I purposely avoided referring to water-closets. You condemn sinks?

The Health Officer: Yes, I think the siphon is open to objection in all cases, except where the water in it can be constantly replenished with fresh water.

Mr. Nanabhai N. Katrak: You say a siphon under the conditions you mention is justifiable?

The Health Officer: That is the condition under which it will do the least harm. I cannot see any advantage of a siphon in a *nahani*. We know for what purpose a *nahani* is used, and under such conditions it will become choked with impurities in a short time.

Mr. Nanabhai N. Katrak: You simply allow it under the circumstances you have named?

The Health Officer: I think a siphon inside, and connected with a *moree*, is wrong.

The Commissioner: How long has a siphon been in No. 2 house?

Mr. Smith: Nine or ten months.

The Commissioner: Have you had any complaints?

Mr. Smith: None.

The Commissioner: Have you discerned any smells?

Mr. Smith: None at all.

Mr. Ardesir D. Mody: Is it not possible that the inhabitants may be so habituated to a smell that they cannot detect it when it does exist?

Mr. Smith: Yes, that is possible.

The Commissioner: I did not smell any myself.

Mr. Blaney: You are acquainted, Dr. Weir, with the way in which the poorer classes, especially in chawls, manage their *morees*; do you think that a stone appliance as suggested could be used?

The Health Officer: I have very great doubts; it is a question of opinion.

Mr. Blaney: Don't you think the tendency would be to neglect it?

The Health Officer: I think the poorer classes are so much occupied with their business that unless the *moree* became obstructed they would not pay any attention to it.

Mr. Blaney: That is your experience?

The Health Officer: Yes.

The Commissioner: If it became obstructed, it would overflow into the *nahani*.

The Health Officer: Yes, and then you would have the people working with an iron bar.

The Commissioner: Mr. Smith, what do the inhabitants of the chawl in question say they do if they find the siphon obstructed?

Mr. Smith: They take out the obstruction with their hands.

The Commissioner: Not with an iron bar?

Mr. Smith: No, with the hand.

Mr. Blaney: What are the inhabitants?

The Commissioner: Dhobies.

Mr. Blaney: The whole chawl; that is not my experience, but, however, we can find that out for ourselves.

No. 4—Mr. Hewson's Suggestion.

Examination of Mr. Hewson.

Mr. Blaney: This is one of the most important experiments of the whole lot, because you will see it is without a house gully; therefore, I think it involves very serious hygienic considerations. Here it is not so much an engineering question as a hygienic question. The information before us is that the Health Officer cannot approve of the system, as foul gases are carried up and disseminated amongst the people of the house. We will be able to see the system ourselves, and I dare say Dr. Weir and Mr. Hewson will be able to explain to us the results of the experiment on the spot. On the report I do not think we can do anything but wait the personal inspection with Mr. Smith, Dr. Weir, and Mr. Hewson. I do not propose to ask any question now.

By Mr. Nanabhai N. Katrak. Q.—With regard to these two chambers which have a partition between; the chamber in which the water is received is supposed to have all the solid matter inside and allows only the water to go into the other chamber; is it possible for floating matter such as corks or leaves to pass into the second chamber and choke the siphon? If this occurred, would the floor of the house have to be taken up to clear it out, and what means have you taken to prevent choking? *A.*—The means taken to prevent floating substances passing is by a large iron grating, about 2′ 6″ long and 1′ 6″ across. That entirely prevents floating substances passing. On inspection I found a quantity of sugarcane, mango seeds and other things floating against this grating. The siphon has been working satisfactorily for seven months and there has not been a single block. *Q.*—What is the size of the holes in the grating. *A.*—$\frac{3}{8}$″.

Q.—Is it likely to allow floating matter to pass? *A.*—It might allow thin sticks to pass. *Q.*—I put this question because I did actually see sticks lying there, and I thought that if these sticks were allowed to flow into the chamber, they would block it. With regard to the ventilating shaft under the verandah, could not this be placed elsewhere? *A.*—It is not under the verandah. *Q.*—That is the wording of the Health Officer? *A.*—I think the Health Officer is not quite correct; it is outside the house.

The Health Officer: You can satisfy yourself on that point. I think my impression is correct; it is just under the noses of the people. However, you will see.

Mr. Hewson: The ventilating shaft is 52' 9" in height.

Mr. Bhalchandra K. Bhatawadekar: We are working in the dark. I think it would have been better if we had inspected these systems before discussing the report.

Mr. Blaney: I do not agree with Mr. Bhalchandra; we are educating ourselves now, and we shall know what to expect.

Mr. Nanabhai Katrak: What cesspool does Dr. Weir refer to?

The Health Officer: I refer to the chambers on the ground floor.

Mr. Viegas: The privy seats on the 1st, 2nd, and 3rd floors were covered with night-soil. Have you seen that, Mr. Hewson?

Mr. Hewson: It occurred during the riots. (Laughter.) Numbers of people rushed in and had evidently been somewhat disturbed.

Mr. Viegas: Was it not the inmates of the house?

Mr. Hewson: I do not think so.

The Commissioner: When did you examine the house, Dr. Weir?

The Health Officer: After the riots.

The Commissioner: Was it within a day or two, a week or two, or a month or two? There appears to be a continuity about this deposit, which is somewhat extraordinary.

The Health Officer: It was about one month after the riots when I saw the night-soil.

Mr. Viegas: I would like to know from Mr. Hewson, after he has read the observations of the Health Officer, whether there are any matters he altered in his system? The Health Officer says "it is wrong, I hold, to construct a cesspool inside a building." *Mr. Hewson:* The objection does not exist. *Mr. Viegas:* Where is the cesspool? *Mr. Hewson:* There is a catchpit at the bottom of the ventilating shaft which receives the sullage and passes it outside the building. *Mr. Viegas:* The Health Officer says it is inside the building? *Mr. Hewson:* I certainly claim it is outside the building. *Mr. Viegas:* Is it outside the wall of the house? *Mr. Hewson:* Yes.

Mr. Blaney: If there is no gully, how can it be outside?

Mr. Hewson: There is a shaft at the back.

Mr. Ardasir Mody: Supposing there is no space between the houses, where is the catchpit?

Mr. Hewson: You would build it against the outer wall, not connected with the interior in any way.

The Commissioner: If no gully exists, how can it be anywhere but inside the house?

Mr. Hewson: It can be within the area of the building. *Q.*—Supposing the whole site is occupied? *A.*—Then build against the external wall. *Q.*—In the street? *A.*—At the back of the building. *Q.*—Supposing there is no room at the back of the building? *A.*—You must make room. *Q.*—How; supposing there is a richer person at the back and a party-wall between? *A.*—Build it within your own area. *Q.*—Then it is in the house? *A.*—It would be on the fringe of the building.

The Commissioner: I understand you; it is a mere quibbling with words?

Mr. Balchandra K. Bhatawadekar: What about the ventilating shaft shown under the verandah?

The Health Officer: Of course it is outside the verandah. People look down on the ventilating shaft and they complain of the smell and they asked me to remove it.

Mr. Bhalchandra K. Bhatawadekar: Was the smell from sewer gas or decomposed material? *A.*—The experiment is seen under rather unfavourable conditions, as you require a lamp to examine it. If you have a cesspool containing matter more or less foul and you put a pipe on top, you must carry smells up above.

Q.—You say it is wrong to put a cesspool inside a building? *A.*—As the Commissioner put it just now, if you have simply four walls and don't have a cesspool inside the building, you must knock a hole in the wall.

The Commissioner: It is practically a little chowk inside the building.

The Health Officer: I looked upon it as being inside the building. For all sanitary purposes it is inside the building; of course you will see it for yourselves.

Mr. Nanabhai N. Katrak: With regard to the question of whether it is inside or outside, if I put it this way, it may meet the views of Mr. Hewson. In one sense the shaft is outside the house because the connection is there, and in another sense it is inside, because it is in connection with the privies.

Mr. Hewson: I say it is outside, because there is a verandah between the ventilating shafts and the living rooms.

Mr. Viegas: But there is a communication with the privies.

Mr. Hewson: Yes.

No. 6.—Mr. Wallace's Suggestion.

Mr. Blaney: We might ask Mr. Wallace the question whether his ideas, as put before the Committee, have been carried out in this experiment?

Mr. Wallace: I think, Sir, I can only endorse the remark of Dr. Weir,—all these experiments have been made to prove something, demonstrate something. I cannot say that this experiment makes any difference in the gully in which it has been tried. I have seen the gully, and I don't think any experiment could make any differ-

ence to the stench which exists there. The gully is foul and the walls are saturated with matter thrown out of the windows. Let us suppose that the gully was well paved and the catchpits, &c., were cleaned out conscientiously twice a day. I say even in such a case there would be no difference in the smell from the gully so long as filth is thrown out of the windows. Therefore, I think no purpose has been served by the experiment. One thing, however, has been strongly impressed on my mind during these experiments which I think deserves the special attention of this Committee, that is, the use of *nahanis* as latrines has been facilitated by these experiments. From what I have learnt, one of the reasons why the people appreciate the house-connections is that they facilitate the use of the *nahani* as a latrine. I don't think the inhabitants will use the public latrines as they should, if any facility is given them in their own houses to avoid the trouble of going to public latrines. I am afraid the question of house-connections will be a serious matter.

Mr. Viegas : Has your scheme been departed from in any way ?

Mr. Wallace : No; I think I cannot complain of that ; only the gully is such an one as to render the experiment unsuitable. I am inclined to think that the people on either side of the gully are not the people who should have latrines in their houses, and the smell will never be got rid of until they cease to throw filth out of the windows into the gully.

Mr. Viegas : Do you think that with a better gully your scheme will be an improvement on the existing system ? We want a system that will be suitable to a large number of gullies, and one which will prevent soiling of the gully if possible.

Mr. Wallace : I don't know of any house-connection system which would prevent the soiling of that particular gully.

Mr. Nanabhai N. Katrak : The catchpit in your system was an alternative scheme ? *Mr Wallace* : I don't think such a gully need be troubled with any catchpit ; it is easier to clean it, if the matter falls on a level surface. It makes no diminution of the stench, and if the cesspool is not cleaned out regularly, there would be little appreciable difference in the smell. *Q.*—Do you believe that the water seal is necessary or is only an ideal luxury ? *A.*—In this particular gully an ideal luxury. *Q.*—You know that one of the sources of smells is the fouling of downtake pipes ; another, according to the Health Officer, siphons ; and thirdly the soiling of the gullies. You say that the smells from such a gully as you described are equal to all these ? Supposing you had been given a gully which was kept pretty clean, then do you believe that this intercepting chamber would have diminished smells, or have done good to your scheme ? *A.*—You mean with regard to the passage of air through pipes. *Q.*—We consider the sources of smells to be three—foulness of downtake pipes, siphons on the wall, as well as at the foot of the gully, and foulness of the floor of the gully. Now you complain that the gully given you is a very foul one. We take it that you had a better gully ; would this intercepting chamber have served your purpose ? *A.*—It could.

Q.—The Health Officer objects to the chamber? *A.*—It was estimated that the chamber would be emptied at reasonable times which would prevent the contents putrifying. I see, therefore, no reason to modify what I stated at previous meetings, but this particular gully was very foul on the surface, and the walls were also foul, and I should think it must have been difficult to distinguish the smells which came from the walls and those that came from the cistern.

[At this point the Hon'ble Mr. Javerilal vacated the chair and Mr. Blaney was requested to take his place.]

Mr. Wallace: The experiment of which I am speaking has for its object the disposal of waste water from a house and the prevention of returning gases formed in the pipe, not the gases from the gully. The gases in the pipe arise from decomposing matter and are forced down the pipe at each discharge of water. The gases would flow into the house below if the discharge came from an upper house or got into the gully. The water trap is designed to prevent the escape into the house below and a stone is laid in the *nahani* to block the opening. In the gully a catchpit was placed to close the bottom so that the gases forced down by the descending water might escape up a pipe running to the top of the house. It is an old system in Europe. But in such a gully as the experiment has been tried in, there is so much smell that the catchpit is superfluous because it could not make any difference to the smell in that gully. Therefore, the experiment demonstrates nothing. With regard to the merits of the cesspit as a chamber for accumulating putrescible matter, which would otherwise overflow on the gully, we all assumed that this chamber would be cleansed at fixed periods; for, if it is neglected, it becomes a nuisance. If it did not exist and the whole of the refuse went on the floor of the gully, the result would be much the same and create a nuisance.

Mr. Katrak: What is the capacity of the chamber?

A.—The necessary capacity might be one quart only, but it would be soon blocked.

Q.—What is the capacity of the present chamber?

Mr. Smith: About one gallon.

Mr. Wallace: So, if any nuisance arises from the catchpit in excess of that on the gully, it arises from the decomposition of a gallon of water.

The Commissioner: Why did you not object to the gully, Mr. Wallace, in which your experiment was being tried?

A.—I wrote to you and gave my reasons for not objecting. I did not know where the experiment was being made.

The Commissioner: How is that? I want to clear up this point, for I am sorry the experiment should have been made in so unsuitable a place.

Mr. Wallace: I had a letter mentioning a gully in the Lohar Chawl where the experiment was to be made and I wrote you.

The Commissioner: Mr. Wallace wrote on the 4th September recommending a number of experiments in the Workshops, and Mr. Smith tells me I told him to select a gully and go on with the work.

APPENDICES.

The Secretary read the following :—

ADELPHI HOTEL,
BYCULLA, *4th September* 1893.

MY DEAR SMITH,

In response to your letter of yesterday I shall be glad to look at the house you indicate in Lohar Street with a view to experiments in downtake pipes.

At the same time I would strongly urge you before doing anything in public to ascertain all that you possibly can by experiment at the Municipal Workshops where everything is handy.

For instance, the ventilation of downtake pipes requires that the velocity and pressure of the currents set in movement by falling water be measured by proper instruments. This will fix the size of the ventilating pipe and the amount of necessary seal at foot if a catchpit be used. The instruments have to be made and tested.

The current due to the sun's heat on the pipes must be ascertained by actual measurement and noted.

The rate of current required to keep clean or to cleanse a siphon should be ascertained with different solid materials and with and without a hard tar varnish in the syphon, and the fluctuation of pressure of the sewer atmosphere should be noted at such places as are most liable to fluctuation just now by reason of filling up suddenly during rain, etc.

Other things may suggest themselves as you go on.

If you have height enough at the Workshops, every apparatus should be tried there in every possible way before going on to a public test.

There are generally surprises which come unannounced to the experimenter. I have no cut-and-dry scheme ready for you, and like the other experts can only offer "the best of my knowledge and belief"—Yours, very truly.

JOHN WALLACE.

The Commissioner : Your statements, Mr. Wallace, are borne out by the records ; you did not know where the gully was.

Mr. N. Katrak : Taking the capacity of the chamber as one gallon and a-half, how often during the 24 hours do you think it should be emptied to make it less injurious to the inhabitants of the house ?

Mr. Blaney : That is purely a question of hygiene and not one of engineering.

Mr. Wallace : Once in 24 hours.

Mr. N. Katrak : Would it make any difference to the smell in the gully ? (No reply.)

Mr. N. Katrak : With regard to the third part of your scheme—cleaning pipes with a brush, has it succeeded ?

Mr. Wallace : I have never cleaned sewer pipes with a brush. I suggested it. I have seen water pipes and boiler tubes cleaned, and I have not the least doubt straight pipes could be cleaned.

Mr. N. Katrak : Has one been made, Mr. Smith ?

Mr. Smith : Yes ; but it has not yet been tried. It was intended to be used at an inspection by the Committee.

Mr. Blaney : Who is to use the brush ?

Mr. Smith : Either the Municipality, or the people themselves.

Mr. Blaney : The people themselves don't even brush their hair, let alone pipes. (Laughter.)

Mr. N. Katrak : I don't think it makes any difference whether your intercepting chamber is there or not.

Mr. Wallace : No.

Mr. Bhalchandra K. Bhatawadekar : Do you think that under better circumstances your system is likely to succeed, Mr. Wallace? *A.*—Yes, certainly. *Q.*—Unfortunately you had a bad gully? *A.*—I don't doubt it. I should not like you to think that the catchpit at the bottom is an essential part of the scheme ; it could be done by a catchpit or valve ; only when the smells in a gully are in excess of anything that comes up the pipe, it is useless. The *nahani* can be closed by a stone. Catchpits and ventilating shafts are superfluous in such houses.

Mr. Kaikhosro N. Kabrajee : I should like to know why you did not protest against the gully and draw the attention of the authorities to it ?

Mr. Blaney : Mr. Wallace sent a letter to the Engineer which gives Mr. Wallace's answer in full.

Mr. Kaikhosro N. Kabrajee : That letter does not say anything about the gully.

Mr. Wallace : I did not think it was possible to make any useful experiments until these things were settled in the workshops.

Mr. Blaney : And you did not know where the experiments were made ?

Mr. Kaikhosro N. Kabrajee : When did you know they had been made ?

Mr. Wallace : I wrote to the Commissioner and said if the experiments had been made, I would report on them.

Mr. Ardasir D. Mody : Under the circumstances which exist in Bombay you do not think in the majority of cases your experiments will answer the purpose of minimising smells ?

Mr. Wallace : Not in many cases.

Mr. Ardasir D. Mody : In the case of the poorer classes ? *A.*—I think with Dr. Weir we should have no connection with the house at all.

Q.—The middle classes ? *A.*—I think they are quite able to take care of them, and under those circumstances I think my suggestions might be useful as they have been in other countries.

Q.—They are not suitable for the poorer classes ?

A.—They cannot be trusted with connections of any kind, or water taps within their houses.

Mr. N. Katrak : Have the pipes used in the experiments been treated with Angus Smith's process ?

Mr. Smith : All our iron pipes are treated with it.

Mr. N. Kutrak: The first suggestion I heard of it was at this Committee.

The Commissioner: It might have been the first time you heard of it, but it did exist before Mr. Wallace made the suggestion. I understand, Mr. Wallace, that you are adverse to connections in the houses of the poorer classes, any connection in the way of pipes, siphons, &c.? *A.*—Yes. *Q.*—How do you propose in high storey houses to deal with the sullage; should it run down the wall of the house? *A.*—I am not perfectly clear. *Q.*—You must have a duct of some sort? *A.*—Yes, but the disposition to use them for wrong purposes complicates the matter. I am not prepared to advise at a moment's notice; it is a difficult question. With regard to latrines, the public ones should be the only accommodation. *Q.*—Are you aware that when no privies exist in a house and the occupants use the public latrine, we cannot recover halalkhor tax? *A.*—I was not aware. *Q.*—That is an important matter; besides which people will not go to public latrines. You cannot have a latrine at the entrance of every gully and if you have not, people will use the gully. I do not understand, unless you have a pipe of iron or earthenware, how sullage water is to be got rid of without fouling not only the gully, but also the wall of the house in an abominable manner. In such a case the city would be saturated with sewage? *A.*—I am not prepared to advise. *Q.*—I think I heard you say there should be no water connection? *A.*—Yes; no water supplied to the house. *The Commissioner*: Bless my soul, I should have the whole Corporation down my throat if I thought of such a thing! *A.*—I mean not in the chambers. *Q.*—Then they would carry it in in *chatties*? *A.*—But not so much. *Q.*—But there would be the exodus of filthy water which would have to find its way to the gully? *A.*—It is possible to make a duct in such a way that it could not be used for night-soil. Instead of being at the level of the ground it could be raised, and it was not necessary that it should be inside the house. *Q.*—Then, how would the water escape? *A.*—In a pipe, but the pipe may terminate not in the *nahani*, but in a basin or receptacle at such a height that it could not be used for other purposes. *Q.*—They could then throw matter in? *A.*—They do so now. *Q.*—But there are no connections in a great part of the city? *A.*—We have to consider the question, if house connections affect latrines. *Q.*—The use of the *nahani* as a urinal will probably go on, and in some cases as a latrine, especially where there are young children, but I doubt if *nahanis* are extensively used as latrines? *A.*—My impression was that the practice was increasing. *Q.*—Was that the case in the house where your ideas were applied? *A.*—Yes, I gathered that the popularity of the house connection was largely connected with the idea that the use of it as a latrine was facilitated. *The Commissioner*: I have never heard that before?

Mr. Blaney: It is a fact.

No. 7.—THE HALALKHOR CHAWLS.

Mr. Blaney: This experiment was not ordered by us but we ought to take it along with the others and we may visit it during our inspection of the other experiments. The scheme is intended for a poor class of house, and if the Committee wish to ask Dr. Weir any question about it before we go, it would fortify our minds.

Mr. Nanabhai N. Katrak: Would it not be advisable to take the whole of the remarks of the Health Officer?

Mr. Blaney: We had better get all the information we can and be in a position to make our visit before finally considering the report.

The Health Officer examined by the Commissioner.

Q.—The system at Cursetjee Suklajee Street is one of simple connection with the *nahani* by a down-take pipe to an open drain? *A.*—Yes.

Q.—All open drains lead to a large catchpit? *A.*—Yes.

Q.—That is lined with zinc? *A.*—Yes.

Q.—Beyond that is a running siphon with which we have no concern? *A.*—Yes.

Q.—I rather think the system was the putting together of a good many ideas in the Municipality? *A.*—Yes, it is an old system.

Q.—With improvements? *A.*—Yes.

Q.—It is the same as Mr. Smith constructed for the Hon'ble Mr. Fazalbhoy Visram?

Mr. Smith: Yes; it is similar.

Q.—I want to ask what is the essential difference between this system and any other in existence; it lies in the fact that the down-take pipe is broken and leads into a drain entirely open to the air? *The Health Officer*: Yes.

Q.—Do you think that is preferable? *A.*—I think so.

Q.—Have halalkhors complained of smells in their rooms or *nahanis*? *A.*—I don't think so, but I attach no importance to the fact that they have not.

Q.—Have there been any cases of sickness attributable to sewer gas? *A.*—No.

Mr. Blaney: The system has been up about one year? *A.*—I think that, with a system of open channels and catchpits, there can be no sewer gas.

The Commissioner: The pipes may become foul? *A.*—I take it that all pipes become foul; it is inevitable. The problem is to devise means to clean the inside of the pipe by means of a cannula or by having a vent, but I can see objections to that.

Mr. Blaney: Do you think that the system might be recommended by this Committee as a useful one for the majority of poorer houses and chawls in Bombay? *A.*—I think it might be recommended.

Q.—What do the halalkhors do about *nahanis*? *A.*—They have *nahanis*.

Q.—Inside or out? *A.*—On the verandah.

Q.—What prevents sewer gas entering sleeping rooms? *A.*—The space in the form of an open channel between the downtake pipe and the catchpits.

The meeting was then adjourned until Friday the 1st December.

APPENDICES.

BOMBAY, 1*st December* 1893.

At the meeting of the Committee held this day, there were present:—The Hon'ble Mr. Javerilal U. Yajnik, Chairman; Ardasir D. Mody, Esq.; Brigade-Surgeon-Lieut.-Col. S. O'B. Banks; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Dominick A. D'Monte, Esq; Fardunjee N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; Accacio G. Viegas, Esq.; and the Commissioner.

The Health Officer, the Executive Engineer, the Drainage Engineer on Special Duty, the Acting Drainage Engineer, and the Secretary.

J. Wallace, Esq., J. Hewson, Esq., and D. Gostling, Esq., also attended the meeting on invitation.

Re-Examination of Surgeon-Lieut.-Col. Weir, Health Officer.

By Mr. Nanabhai N. Katrak: *Q.*—You say in your report "That the only slight improvement over the present system of house connections is in the guard over the cistern head; that four out of the systems are more or less dangerous, for they embody the dangerous principle of stagnation, or interruption in the sewage;" I should like some explanation of the terms "stagnation" and "interruption"? *A.*—I allude to the stagnation and interruption of sewage. *Q.*—Give an instance? *A.*—Catchpits or cesspools are proposed to be utilised, and they rely for their action on an interruption in fluids passing towards the sewers; otherwise, they would not be of use. *Q.*—Is there a catchpit in the halalkhor chawls system? *A.*—Yes, there is a cesspool there also. *Q.*—What about that? *A.*—The difference is this; it is a considerable distance from the buildings; in the other cases it is either inside or under the building. *Q.*—What is the distance of the catchpit? *A.*—A good distance from the building. *Q.*—Where is it? *A.*—At the end of the gully. *Q.*—Near the roadside? *A.*—Yes. *Q.*—You condemn four out of the six systems, and the drainage system you advocate can only be used in houses or buildings having side gullies. What about buildings which have no gullies, only party walls, where drains go through the houses? *A.*—In that case I am afraid you must have a drain through the house. *Q.*—Would not Mr. Hewson's scheme do for such houses as have no gullies? *A.*—No; I think Mr. Hewson's scheme, instead of facilitating the flow of sewage, keeps it in the house. *Q.*—How so? *A.*—There are chambers or cesspools, and their action is to intercept. *Q.*—How would you drain such a house? *A.*—If you have drains inside the house, they should be so laid that the sewage will flow off at once. *Q.*—How would you prevent solid materials getting into the drain? *A.*—If you had catchpits at all, it is much better they should be on the roadside. In the first

place, all these devices are to assist sewers in doing their work. If you could have a system of sewerage, which would remove all deposits, there would be no necessity for these devices.

Mr. Blaney: The difficulty lies in the solids? *A.*—In the solids.

Mr. Katrak (to Surg.-Lieut.-Col. Weir).

Q.—As far as I see, the scheme proposed by Mr. Hewson seems to be well suited to the character of the houses to which it is applied, and I cannot find that we can escape the difficulty of preventing solids blocking drains if we put the catchpits near the road? *A.*—On visiting the houses you will hear what the inhabitants say.

Mr. Blaney: Never mind what they say, you would not recommend it? *A.*—I certainly should not.

Mr. Katrak (to Surg.-Lieut.-Col. Weir).

Q.—You say, Dr. Weir, in your report: "The requirements of each class have to be considered. I do not think that a system of horizontal pipes should be placed to any dwelling in which the people use leaves for domestic purposes." What horizontal pipes do you refer to? *A.*—The pipes laid along the ground or along the sides of the houses.

Q.—You mean gully pipes? *A.*—Yes. *Q.*—Why are you opposed to horizontal pipes? *A.*—For the simple reason that they are more likely to become obstructed. Any obstruction in such a pipe must be more dangerous than in an open drain. *Q.* (To Mr. Smith).—Former evidence showed that such pipes never became choked? *A.*—Mr. Smith: As regards street sewers, except in a few instances, that is correct. *Q.*—But as regards house pipes? *A.*—They become choked. *Q.*—You seem to condemn, Dr. Weir, pipes as an expensive system of house drainage; do you mean to do away with downtake pipes? *A.*—No. The buildings I referred to have only a ground floor; where you have several floors, you must have downtake pipes. *Q.*—About the drainage of party wall houses with only back gullies? *A.*—It is impossible to give an opinion which would be applicable to all cases, but so far as I can see the only thing to be done is to have, however objectionable, a drain through the house. *Q.*—Explain fuller? *A.*—You have the system everywhere in the Fort; a drain running down the centre of a large number of houses in the Fort. *Q.*—Where should the outfall be? *A.*—You are giving a case where there is no option, it must be in the street. *Q.*—You do not recommend a catchpit to guard against solids? *A.*—It keeps the nuisance in the house. *Q.*—You would have none? *A.*—That is the least of two evils. *Q.*—At present in a house of more than one storey the downtake pipe comes from the *nahani* of one storey and breaks off at the *nahani* of the next storey, and so on to the ground; do you think that is the only way in which the matter could be managed? *A.*—A question such as that must be decided in the case of each house when the plans are before you.

Q.—But supposing you had to drain such houses as those I have described, would you recommend such an arrangement as is at present in existence? *A.*—A system of vertical pipes must be adopted.

Q.—I don't understand? *A.*—You have seen the present system.

Q.—Yes; would you have such a system as now exists? *A.*—I don't think you can have anything else.

Q.—Is that the only one you can suggest? *A.*—Yes.

Q.—In such a system there are two disadvantages: if the pipe coming from the upper storey is fouled, then according to the direction of the currents, the people up or down will suffer for the faults of other people? *A.*—In the present scheme you have a system of ventilating pipes.

Q.—Do you think there ought to be one continuous pipe from the top storey to the ground floor with a ventilating arrangement like this? (Pencil drawing.) *A.*—But how can you have ventilating pipes in that case?

Q.—One pipe might be carried to the roof and at each *nahani* have a vertical joint, so that if a person wishes to save himself from the smells due to the negligence of the people in the upper or lower storey, he can do so by placing a stone over the connection? *A.*—There is no possible way of keeping vapours out by a stone; it is no doubt very useful. *Q.*—It might minimise the nuisance if it did not prevent it entirely?

Mr. Blaney: Is not the suggestion of Mr. Katrak something like the ostrich hiding its head?

The Commissioner: It would be a far better system to get nature to do away with the process of digestion and then we need not have sewers at all.

Mr. Nanabhai N. Katrak: I think I have not made myself understood. Perhaps Mr. Wallace or Mr. Hewson understood what I meant.

Surgeon-Lieut.-Col. Weir: We have the system you refer to existing in the Fort and in the old Municipal Offices.

Mr. Nanabhai N. Katrak: In all party-wall houses you use pipes like this? (Drawing.) *A.*—In some cases the pipes can be seen. *Q.*—They terminate within the floor of the *nahani* below? I don't see how the ostrich's head is hid in such a case? You say in the last para. of your report, "The system should be modified according to the views of the Engineer, Mr. Smith, acting, if necessary, after consultation with the Health Officer and the wishes of the people themselves." Do you allude to any particular views of the Engineer? *A.*—I mean his opinions and judgment. *Q.*—Why is consultation with the Health Officer necessary? *A.*—In most cases I think it is necessary to take the opinion of the Health Officer. *Q.*—But if his view was

opposed to that of the Health Officer? *A.*—There is always a reference to the Commissioner, who consults the best authorities. If in the case of chawls the open system was adopted, a consultation with the Health Officer would not be necessary. *Q.*—You think you ought to be consulted when the principal is laid down?

Mr. Blaney: That is what we are doing.

Mr. Nanabhai N. Katrak: *Q.*—What object have you in wishing to visit Calcutta, Madras, and Rangoon? *A.*—To learn something. *Q.*—Have you had favourable reports of the sewerage at those places? *A.*—I have heard both favourable and unfavourable reports. *Q.*—Is it out of curiosity you wish to pay this visit, or to study the systems. *A.*—The object is to learn and see something.

Examination of Mr. Hewson.

By Mr. Nanabhai N. Katrak: *Q.*—In the house you have drained in Bazaar Gate Street, what is the arrangement for carrying away the waste water from the different stories? *A.*—By a number of downtake pipes from each *nahani* carried to a paved open space about 3 feet wide in front of the ventilating shaft. The discharge into that paved space in which there is a small drain which leads to the 4" pipe that enters the ventilating shaft running into the catchpit. *Q.*—What is the arrangement between each storey? *A.*—The *nahanis* are placed on each floor, one over the other, and there is a vertical pipe passing down. It is a continuous pipe to the ground floor when it is taken at an angle in front of the ventilating shaft. *Q.*—It is one continuous pipe beginning at the top storey and running to the catchpit, and at each *nahani* there is a connection? *A.*—Yes. *Q.*—It is protected by a sieve? *A.*—Yes, by a perforated copper plate. *Q.*—Where does it terminate? *A.*—At the top floor. *Q.*—In the *nahani* of the top floor? *A.*—Yes. *Q.*—So that it is possible when the current is upwards for smells or gases to pass into the joint pipes? *A.*—It is not my experience that any smells are felt in that particular house, but where the pipes, as in other houses of the Fort, and in these houses before alteration, were connected directly with the drain, then the sewer gases pass up the pipes into the rooms. I do not think that in the case of a pipe descending from *nahani* to *nahani* and terminating in an open space in front of a ventilating shaft, gases or bad smells can generate. *Q.*—With regard to the present arrangement of pipes between the storeys, it is not a continuous pipe as in the system carried out by you; there is a break at each storey? *A.*—I think there should certainly be a break where you can clean the pipe in case of a choke. *Q.*—The present arrangement in party-wall houses is one pipe coming from the top storey and terminating in the *nahani* of the next storey and then another pipe begins. Would you change this system and make a continuous column? *A.*—I do not think there is any disadvantage or advantage in having a break at each floor, provided you have no connection with the

drain. I think it is immaterial. *Q.*—So the pipes will not smell? *A.*—So long as they are not connected with the drain. *Q.*—I think the evidence before us shows that the pipes do smell. Supposing an upwards current, is there a chance of bad smells going into the room? *A.*—A small chance so long as there is no connection with the drain.

Q.—The second scheme is not before us, so I cannot put questions about that.

Re-examination of Mr. John Wallace.

You, Mr. Wallace, must have seen the system of a pipe carried from one storey to another with a break at the top storey? *A.*—(Mr. Wallace): Yes. Do you mean iron pipes or masonry?

Q.—Iron pipes. These pipes terminate just above the floor of the *nahani* on the storey next below? *A.*—Yes.

Q.—And in some way the pipe passes to the next storey and so on? *A.*—Yes.

Q.—Do you believe that the interior of the pipes become coated with slimy substances which give off smells? *A.*—Certainly.

Q.—And smells go upwards and downwards according to current? *A.*—Yes; when I lived in the Sirdar's Mansions the connection was by pipes which exposed to the sun. The pipes were made without jointing and water discharged from bath rooms at each storey. Many tenants complained of smells; some fell sick and some left. In my case I was troubled by smells in the bed-room in the afternoon; the pipes from which the smells came terminated in a catchpit by which the pipes were cut off from the sewers. Every afternoon smells come out of the pipe which leads into the kitchen under the roof, where, no doubt, urine was put into the pipes. I persuaded the landlord to make alterations. The landlord put up a scaffolding and had the joints of the pipes closed with Portland cement. Still the smell continued, and eventually I discovered that one of the joints of the pipe concealed close to my bed room window had not been made. The scaffolding was re-erected, the joint made, and the smell ceased. I therefore have no doubt that the smell arose from the foul lining of the pipe. *Q.*—My question was with regard to the direction of the current. *A.*—The direction of the current is influenced by several things; among them the heat of the sun on the pipe in the afternoon, which would produce an upward current. The cooling of the pipe at night which would result in a downward current and the variations of barometric pressure which occur twice a day, causing flow of air in and out of the pipe. *Q.*—Inside the house? *A.*—Yes. Water also poured into the pipe would drive the air down before it to any available exit. *Q.*—Cannot the air travel upwards or downwards according to the temperature? *A.*—Any difference between the temperature inside and outside of a house would cause a movement of the air in unsealed pipes connected with the houses, the current varying either way according as the air inside or outside is warmest. *Q.*—So for the faults of people living in any one storey and who abuse the object for

which the pipes were made, people of the lower or upper storey have to suffer? *A.*—If the pipe is closed at the top, instead of being open to the air as it should be, the upper storey is liable to suffer more than any other. When the pipe is left open at the top, the upper storey suffers least. *Q.*—Now we have to consider the joints of the pipes at the side of the rooms? *A.*—There should be a continuous pipe from the top of the house to the bottom. *Q.*—With a number of breaks at each *nahani?* *A.*—No. *Q.*—I learn for the first time that Mr. Hewson has got a continuous pipe terminating in the catch-pit. Do you think a continuous pipe carried to the top of the house, thus making a ventilating pipe, each *nahani* being connected with a branch, would obviate the nuisance? *A.*—Such a system is largely used in Italy and France. *Q.*—Terminating at the roof? *A.*—Yes; the chief object is that in their case the pipe is made of considerable diameter, 10″ or 12″. It is made wide in order that the flowing liquids shall not set up a current. But there is this to be considered—in such pipes you have a large surface to foul, which is to be balanced against the risk of currents in smaller pipes. The pipes are made of lime-stone, and at the price, they make a fairly good pipe if properly fitted with air-tight joints. As a rule they are turned in a lathe with excellent joints which are made in fine cement. I think, therefore, it is possible to have a vertical pipe and arrange it in such a manner that the gases shall escape at the top of the house. *Q.*—You have spoken of pipes of a large diameter; which would you advise? My idea is that a small pipe protected with a seal is the best, as the current of water can wash it on all sides? *A.*—You certainly have a larger foul area in the large pipes, but the most perfect system is the one with two pipes. *Q.*—You can have two pipes in the house? *A.*—Yes; the drain pipe would then be of a smaller diameter if you made it like the Italians. *Q.*—So there is a disadvantage in all these pipes. What would be the conditions which would lead you to prefer one to another? *A.*—We can only choose the least of several evils, and the vertical unbroken pipe is the least. *Q.*—About the diameter; you say you have 10″ to 12″ in Italy? My idea is that pipes of that diameter would be highly stinking. *A.*—I have proposed several experiments, and until these are made it is impossible to give more than an opinion. We must have some standard. *Q.*—Will you describe the experiments? *A.*—They are described in my letter of September 1892. Briefly, I may say that we know that when water is poured into a vertical pipe, if the pipe is partially filled, a current of air is carried down.

Mr. Gostling: I have seen it come up. Mr. Barrow on one occasion made an experiment in the old office and, after pouring water down a clean pipe, found the smell of urine come up from below.

Mr. Wallace: The experiment I propose can easily be carried out in Bombay and thus we may determine the most convenient diameter for receiving an average quantity of water.

Mr. Nanabhai N. Katrak : Can we get some idea about the currents by the analysis of the air at the end of the pipes ?

Mr. Wallace: No; it is a question of the quantity of air set in motion and the means of getting rid of it, or allowing it to pass up the same pipe whilst the water is going down. *Q.*—Where does the difference lie between your scheme and that carried out at the halalkhor chawls ? *A.*—The difference principally is that at the halalkhor chawls there is no *nahani* inside the house ; and the water-supply is outside. *Q.*—But when it has come to the floor of the gully, what is the difference ? *A.*—I don't remember the details of the halalkhor chawls, but my impression of the general difference is that the chawls are only two stories high and there are no *nahanis* inside, which I look upon as a great advantage.

Surgeon-Lieut.-Col. Weir :"After the water leaves the down-take pipe and comes near the surface of the gully in your case, there is a catchpit ; in the case of the halalkhor chawls there is no catchpit.

Mr. Wallace : There is one at the end.

Mr. Nanabhai N. Katrak : Which of the two systems do you prefer ? *A.*—(Mr. Wallace) I prefer the system which dispenses with *nahanis* and water-taps in the house. It is not desirable to have a water-supply in such a house, and it is not desirable to have a *nahani* on account of the uses to which the people put it. The *nahani* should be on the verandah.

Q.—Supposing your catchpit were done away with and we allowed the water to pass on to the surface of the gully, do you believe that the catchpit you have suggested is absolutely necessary ? *A.*—Not at all ; it makes no difference in that gully. *Q.*—Taking all in all, your scheme practically comes to that carried out at the halalkhor chawls ? *A.*—I don't quite understand ; in the one case the arrangements are inside the house, and in the other outside the house. With that difference the scheme is very much the same. *Q.*—You are in favour of open drains ? *A.*—Yes ; an open system of drainage.

By Mr. Balchandra K. Bhatewadekar : Mr. Wallace, you say you would prefer no *nahanis* at all inside houses ; that is out of the question ; *nahanis* are absolutely necessary inside the house ? *A.*—I should be sorry to cause a wrong impression, but I think it would be better if the *nahanis* were outside the door of the house where it is possible. *Q.*—As a matter of fact they are inside ; how would you deal with them under the circumstances ? *A.*—I have never said, abolish *nahanis*.

The Chairman : What would you propose where *nahanis* exist ; we cannot abolish the present state of things ?

Mr. Wallace : We are discussing, I believe, the best system possible, and we must afterwards make exceptions where necessary, as it is impossible to pull down and rebuild the houses. We are now discussing the best system where there is a choice.

Surgeon-Lieut.-Col. Banks : Having now had such shoals of evidence of this nature, I think it is highly desirable that we should now adjourn and visit the various places where improvements have been carried out. I don't see what good we can do sitting here now.

Mr. Blaney : We had not had the pleasure of Dr. Banks' company when it was decided to take the evidence of the Engineers on their systems before visiting the places where the experiments have been carried out. We have not yet had a word from Mr. Gostling.

Surgeon-Lieut.-Col. Banks : Surely we could hear him on the spot ; it would be more intelligible to me.

The Chairman : I am in the hands of the Committee.

Mr. Blaney : Mr. Gostling has come here with considerable difficulty to himself, and he should be allowed to state his opinions.

Mr. Hewson : I should like to make a short statement to the Committee. There are a few facts connected with my system of drainage at Bazaar Gate Street which have not been elicited by the questions put to me at the last meeting. It appears to me that these facts are of importance, and they should be brought to your notice before you make a personal inspection of the experiment. You are aware that my system comprises a ventilating shaft, which measures inside 2' 9" by 2' 8" and is in height 52' 9", and the outlet is a 6" pipe with a Boyle's patent ventilator.

Mr. Gostling : The ventilator is always moving ?

Mr. Hewson : It has no motion whatever. The shaft has a catchpit at the bottom, a siphon with two inlets and two outlets, also the soil pipes from the six privies and a ventilating pipe 4" from the sewer. The entrance to the shaft is by a small door on the ground-floor. On the 13th July I locked the door of the shaft and cleaned the catchpit. On the 5th August, being 23 days, I opened the door and found a solid deposit of sludge 2'-6" × 1'-5" × 6" equal to 1·46 c. ft. from nine inhabitants.

Mr. Gostling : Mud or water.

Mr. Hewson : I mean the sludge you would get from an ordinary *nahani*.

Mr. Blaney : It was *chow-chow* in character. That is the essence of the thing ; if it was lavender, we might get on all right.

Mr. Hewson : I may correct Dr. Blaney and say it was the solid part of the sullage. What it was composed of I am not in a position to say ; there may have been some lavender in it, but I was not able to detect it. By my letter of the 22nd August to the Deputy Executive Engineer I requested that this catchpit be cleaned every fortnight. The pit was cleaned on Monday the 28th August and was not again cleaned till Saturday the 18th November, being 83 days. I found that the solid deposit from the sullage had run over the catchpit weir and that the floating matter had accumulated

four inches up the side. I never anticipated such a test and find it was only the large area of cast-iron grating and the concentration of liquid sullage that prevented the siphon trap from being blocked. This proves that the system has worked under most extraordinary circumstances. In July there was no water-supply for three days consequent on a burst in the main, and there was therefore no water-flush to the privy. They worked, however, just as well without water. This leads up to the most important consideration—whether privies can be constructed so as to pass the soil into the drain without flushing. I refer to privies worked on the bottle system. It is universal in the city and was greatly admired by your late Executive Engineer, Mr. Russell Atkin. If successful, the saving in carriage of the nightsoil would be enormous, and as a test I have in my drainage system at Mint Road arranged that the soil from five privies should go direct into the siphon and be washed through by the accumulation of clear sullage. The five privies from the house in Mody Street will simply discharge into a basket at the bottom of the ventilating shaft. This work will be completed within a week, and the Health Officer will report on it. Dr. Weir in his report says there was a concentrated smell from the cesspool. I found a smell from the catchpit concentrated just above the privy seats on the first and second stories, but not on the fourth and fifth. This foul air could have escaped above the doors of the privies which are open, but it would not. On suddenly opening the privy door the foul air was perceptible and then became diffused. I concluded that the foul air was caused by the want of a fresh-air inlet. The inlet at the bottom of the ventilating shaft was 4", giving an area, when clear of sullage, of 12·56", whereas the outlet of the Boyle's ventilator was 28·27". I therefore inserted two 5" pipes at the bottom of the shaft which increased the fresh-air inlet by 39·36", and I found it had the desired effect in preventing the heavy air accumulating over the seats. This success proves that Boyle's patent ventilator was acting and carrying off the foul air at the top of the ventilating shaft above the roof of the building. As you enter the house you will notice a slight scullery smell on the ground-floor. That is due to the sullage discharge from the down-take pipe into a paved open space in front of the ventilating shaft. I think myself it would be an advantage to extend those pipes directly into the shaft and thereby remove the nuisance.

Mr. Blaney : Do you wish to say anything as to whether your scheme was properly carried out ?

Mr. Hewson : The whole of my plans have been adopted, with the exception of the tap on the water flush. I asked for a spring tap, but Mr. Smith gave it as his opinion that these soon got out of order.

Mr. Blaney : You say your scheme has worked under extraordinary circumstances ?

Mr. Hewson : I think that certainly not more than 15 days should be allowed to pass without removing the solid part of the sullage.

Mr. Katrak : How do halalkhors enter the house?

Mr. Hewson : They do not enter. I find a cooly will remove the matter.

Mr. Blaney : The sweepers would not be allowed in. One question I would like to ask, and that is this. Having seen your system put in this party-wall house, and as there are 10,000 of such houses in Bombay, do you suggest any improvement which you would like to see carried out before we report on this experiment? *A.*—I have just said in the remarks I have made that it would be a great improvement if the sullage was discharged right into the ventilating shaft. That is the only improvement I can suggest. *Q.*—Then I put it in this way : Do you suggest we should make this improvement and then wait to see the result? The Committee would not hesitate to grant a little further time, as this question of party-wall houses is a serious one? *A.*—I would recommend that you make similar drainage connections to half a dozen houses. I cannot suggest any other improvement. *Q.*—That would only be a question of multiplication? *A.*—You might meet some other difficulty you do not meet here. *Q.*—Does this house not embrace all the peculiarities of a party-wall system? *A.*—All that present themselves to me. *Q.*—You have given this explanation about your system ; is there anything else? *A.*—These are the only remarks I have to make.

The Commissioner : You have a running siphon between the catchpit and the sewer? *A.*—Yes. *Q.*—Between the house and the sewer? *A.*—Not between the house and the sewer ; it is at the bottom of the ventilating shaft. *Q.*—In addition there is the running siphon on the house drain? *A.*—Next to the catchpit. *Q.*—Yes, I remember it now ; I had forgotten.

Mr. Gostling said : I have read Mr. Weir's report on what he calls "Mr. Gostling's suggestions," and I would like to state how it was I came to make those suggestions. I offered to give evidence before the Committee some time ago and wrote a report on the subject, in which I made certain suggestions based principally upon experience that I had upon this particular gully at Vithalwady, in which I had made alterations, and also referred to my general experience in the city. My evidence was, however, more particularly as regards this gully. My evidence was this—that some two years previous a system of house-connections—drainage—of privies had been fixed by a plumber which had the approval of the Municipal Engineer, and for some reason or other the pipes laid became choked. I was employed in the matter with reference to a suit in the Police Court in which the Municipal Engineer sued the owner of these houses for not keeping this particular pipe clean. I was asked to examine the pipe and act professionally for them in the matter. I went to the spot and, to my horror, I saw in Vithalwady, which is inhabited by high-caste Guzerati Hindoos, that, whenever the privies were used, the night-soil first went

down into the drain and afterwards rose to the surface through the gully-trap fixed to the houses and floated along the paved gully. This was a shocking state of things, and the whole trouble seemed to have arisen because these pipes had been choked off and on for two years. That is my recollection of the evidence given in the case. The drain had been cleaned once or twice by the Engineering Department and they found it a very troublesome matter, but for a year night-soil had been flowing along the top of the gully. In the report I prepared for submission to this Committee, I suggested that the difficulty might be got over by the pipe, instead of being closed, being an open one, or rather an open drain with a narrow neck of about 3" sufficient to allow the halalkhor's broom to enter and clean it when necessary. Having given that evidence, I was closely cross-examined by Dr. Viegas as to whether it would be possible to cover this drain. I proposed in some way to keep the smell from the drain entering the gully and also to keep the foul matter from being seen by the people. I set to work to devise means of constructing a drain in such a way that it could not act in the same way as the present pipes, but still be a closed drain with facilities for opening it at any moment if there was obstruction. That is what I have carried out at Vithalwady. I don't know if Dr. Weir, at the time of his inspection, knew the reasons which led me to construct the drain in this way, but he certainly made no reference to the manifest improvement on the previous arrangement. Then he mentions that there was a smell of sewer gas all round and a smell of sewer gas outside the gully. I provided that at every junction of the down-take pipe with the drain there should be a break-joint, so that any possible smell that there might be in the drain should escape into the air without having any chance of entering the house or escaping up the pipe. Dr. Weir also mentions that one of the gully traps was blocked up by vegetables. What have I got to do with that? Whenever the gully is cleaned, such obstruction should be removed. Dr. Weir also mentioned that there was a smell in the passage. What have I to do with night-soil on the floor of the passage? We know that children do regularly use these passages for wrong purposes, and it is not a matter with which I am concerned. Then one other thing I would like to mention, and that is a portion of my proposal, was to make a catchpit between the end of the drain and the street sewer so as to prevent refuse, solid matter, &c., getting from the drain into the drain, and I prepared an iron scoop for the purpose of clearing the catchpit frequently. The scoop I forwarded and requested that the pit be frequently cleaned. Of course I don't know whether it has been used.

Mr. Nanabhai N. Katrak : Is the scheme submitted by you the same as carried out? *A.*—There are some modifications.

[At this stage Mr. Gostling was compelled to leave on account of an engagement.]

Mr. Blaney: Has your scheme, Mr. Wallace, been carried out? You say your views have not been carried out. Dr. Weir says they have. *A.*—I have submitted my objection more than once. I have nothing to propose by way of alteration.

Mr. Blaney: Do you think that if the Committee allowed you to take an experimental gully—a bad one of course—and you were entrusted with carrying out the work, do you say your experiment would be a fair one and would prove something?

The Commissioner: That is exactly what he was asked to do.

Mr. Wallace: I was asked by the Engineer whether a certain place in Lohar Chawl would do. I replied I had no objection, but asked him to carry out more important experiments first.

The Commissioner: Did not you understand it to be the wish of the Engineer that you should superintend the experiment at Lohar Chawl? *A.*—I had no reply. *Q.*—No reply with reference to the experiments. You were aware that when the Committee adjourned, it was to put your and other gentlemen's suggestions to a practical test in different gullies. We wished you to understand that the work should be supervised by you. There was a clear understanding to that effect. Instead of doing that, you suggested something else outside the province of the Engineer and what the Committee had determined to carry out? *A.*—What I proposed in addition to my first scheme was of importance and one which had a great deal to do with house connections. *Q.*—However important you may deem the experiments with regard to expulsion of air, &c., they were not before the Committee. *A.*—The gully in which my scheme was laid down is a very bad one. *Q.*—I don't agree with you, for that part of the town. *A.*—Why put a ventilating pipe in that place? *Q.*—Because it was part of your suggestion; you could hardly suppose we were going to carry out the experiments in virgin white gullies? *A.*—Any one should have known that a pipe in such a gully was useless.

Mr. Nanabhai N. Katrak: May I ask what amount of the grant has already been spent?

Mr. Smith: Rs. 7,752.

Mr. Nanabhai N. Katrak: Could not some portion be utilised in carrying out Mr. Wallace's experiments on air currents.

The Commissioner: That is not what the money was sanctioned for.

Mr. Blaney: It was sanctioned for house connection experiments.

Mr. Nanabhai N. Katrak: It is necessary to ascertain and determine currents and fluctuations of air. (The resolution of the Corporation granting Rs. 10,000 for experiments was here read.)

The Commissioner: That does not cover such experiments.

Mr. Blaney: That is for us to determine.

The Commissioner: No, the Corporation.

Mr. Blaney: We must take our censure from the Corporation. We have heard Mr. Wallace's explanation, and I think it would be absurd and wrong for us to say we shall proceed to a certain limit and beyond that we shall not go. Therefore I think that if Mr. Wallace's experiments can be carried out, we should do so.

Mr. Nanabhai N. Katrak: I wish to know whether Mr. Wallace put in a cut-and-dry scheme in the same sense as Mr. Hewson.

Mr. Wallace: I gave my evidence with three other witnesses. We were not bound to tell all we knew, but were asked to make suggestions. I expected no discussion about the matter. I think it is absolutely necessary for the Corporation to have data of the kind I suggest.

Mr. Blaney: Would it cost Rs. 1,000?

Mr. Wallace: No, I should be glad to do it for that.

The Commissioner: I trust Mr. Wallace does not blame me for my action. It was a question of whether we could spend the money. I think it is within the purview of the Committee, but it might be advisable to hear what Mr. Smith and Mr. Murzban have to say as to the practical value of these experiments. You say, Mr. Wallace, ventilating pipes in such a gully as your experiment was tried in are useless? *A.*—Yes.

The Commissioner: All the gullies in that part of the City are the same; then what is the use of making experiments with ventilating pipes which cannot be used? *A.*—None.

The Commissioner: We could not put down-take pipes on footpaths.

Mr. Wallace: With regard to the experiments, there is very little outlay for material. No masonry is required.

The Commissioner: What time will it take? We have already adjourned for 14 months. If we have to start afresh every time an expert makes a suggestion, we shall never get through.

Mr. Blaney: It would be unfortunate if we stopped short and plunged the city into some great epidemic.

The Commissioner: If you can establish that hypothesis, then I agree with you.

Mr. Nanabhai N. Katrak: I propose that the experiments be carried out from that portion of the grant still available.

The Commissioner: Might I further ask what these experiments are intended to establish? *A.*—In the first place the question of ventilation and what size we require in down-take pipes. The influence of water falling and its effect in forcing air into a house; the possibility of siphons working and what current is required to drive certain deposits out. All this can be done in your work-

shops. The details are given in my letter of the 4th September 1892 to Mr. Smith (here gives letter).

The Commissioner: Is it possible that such data does not exist? *A.*—I cannot find it in books.

The Commissioner: Does it not follow that it is of no importance? *A.*—No; you would expect to find it in books on physical science, but it is not there.

The Commissioner: It must be clearly understood that the experiments must be supervised by Mr. Wallace. We cannot have experts coming back to the Committee and saying experiments were not carried out in a proper manner. Otherwise I shall refuse to undertake it unless it is distinctly understood that they shall be supervised by the gentleman who suggested them. In the case of Mr. Hewson, why did he not see for himself that the catchpit was cleaned and not have let it run for 83 days.

The Chairman: Will you undertake the experiments, Mr. Wallace? *A.*—Yes.

Surgeon-Lieut.-Col. Banks: I oppose the spending of further money until I have seen what has been done. Mr. Wallace has had every chance, and now he finds it is not what he wanted. That is his fault, not ours.

The Commissioner: I quite agree with Dr. Banks.

Proposed by Nanabhai N. Katrak, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the suggestion contained in Mr. Wallace's letter of 4th September 1892 to Mr. Smith be carried out, and the cost thereof met from the balance remaining of the grant of Rs. 10,000, Mr. Wallace undertaking to carry out such experiments."

Carried (Surgeon-Lieutenant-Colonel Banks dissenting).

The Committee then adjourned until December 8th.

BOMBAY, *8th December* 1893.

AT the meeting of the Committee held this day, there were present :—

The Hon'ble Mr. Javerilal U. Yajnik (Chairman); Ardesir D. Mody, Esq.; Brigade-Surgeon-Lieut.-Col. S. O'B. Banks; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cawasji Pestonji, Esq.; Nanabhai N. Katrak, Esq.; A. G. Viegas, Esq.; the Special Drainage Engineer; the Drainage Engineer; and the Secretary.

There were also present D. Gostling, Esq.; John Hewson, Esq.; and John Wallace, Esq.

Mr. Blaney: I think Mr. Gostling only made a limited explanation at our last meeting, and I think we might now allow him to resume.

Mr. Nanabhai N. Katrak: I don't see the Health Officer.

Municipal Secretary: He is in Poona on duty.

Mr. Blaney: His absence is embarrassing, as it is his report we are considering.

Mr. Gostling: The remarks I have prepared for this afternoon may contain some animadversions on the report of the Health Officer, and I prefer that he should hear what I say.

Mr. Blaney: Was Dr. Weir informed that this meeting was adjourned until to-day?

Mr. Bhalchandra: It is better that Mr. Gostling's remarks should be made in Dr. Weir's presence.

Mr. Blaney: The position is this. We have met here to consider Dr. Weir's report, and we desired, if the examination of these professional witnesses is concluded to-day, to go and make a personal examination of the experiments. The presence of Dr. Weir at the inspection is essential, as we also desire to examine the system in the Kamathipura Chawls.

Surgeon-Lieut-Col. Banks: I don't see why we should adjourn. The reporter's notes will be sufficient for Dr. Weir.

Mr. Gostling: I don't wish for an adjournment.

Surgeon-Lieut-Col. Banks: I hardly think any useful purpose will be served by animadversions on what Dr. Weir has written. We have nothing to do with Dr. Weir's opinions and Mr. Gostling's ideas on them. Our object is to decide what is the best system of house-connections for Bombay, and not to hear differences of opinion between gentlemen.

Mr. Blaney: Are we not to take evidence?

Surgeon-Lieut.-Col. Banks: We have had piles of it.

Mr. Blaney: You have been absent on some occasions.

Surgeon-Lieut-Col. Banks: My dear Dr. Blaney, I was present and working hard when you were absent. I hope the meeting won't adjourn, as I trusted there would be an end to this kind of thing to-day and something practical done.

Mr. Nanabhai N. Katrak: I think we had better go on.

Mr. Gostling: Mr. President and Gentlemen, if I may be allowed to say so, it seems to me that Dr. Weir's remarks upon what I have done disclose three great defects. His reports contain no description of what it has taken me a very long time to do. It does not give the least idea of what I have endeavoured to do in the way of improving house-connections; that is the first defect. The second is that I think, in justice to myself, Dr. Weir ought to have communicated with me, the same as he ought to have communicated with all other competitors, and given me an opportunity of going to the place where I put up these house-connections and pointing out what I had done. I expected to have that opportunity given to me, and I was greatly surprised when I received Dr. Weir's report showing that he had already made an *ex parte* account of what had been done. The third matter I wish to speak about is that I find, to my great surprise, that Dr. Weir is himself a competitor. I use the word competitor. The whole four of us have been giving our ideas and experience on this matter, and it is the last thing that I would have expected that Dr. Weir, for whose high attainments I have the greatest respect, should have come forward and have said "the whole of "these experiments are wrong; what I propose is the very best." I think, if I might be allowed to say so out of delicacy for his position, that he has had fifteen years before him to make any improvements in house-connections which experience suggested. I think the improvements he has put in should have emanated from him in his official capacity, and that he should not have waited until the Corporation had appointed a Committee to enquire into the whole subject. Dr. Weir has also reported on what has been done by certain official gentlemen, including Mr. Smith, and he now says, "I am the 'Admirable Crichton' who knows all about it." He should not have taken up such a position. I am sorry that Dr. Viegas is not present this afternoon, for I must say, in justice to him, that in working out my original idea I was assisted somewhat by his cross-examination. Dr. Viegas has already visited my experiment in my presence, and I wish that Dr. Weir had done the same before making his report. I should now like to say a few words as to the inception of the idea in my own mind. We have, as you know, had this house-connection business going on certainly for the past twenty-five years. It began long before the present sewerage scheme was talked of, because under the old Municipal rules people had to pave their gullies in certain ways. They could not use ideas of their own, but had to adopt what was known as the V-shaped system. Fifteen years ago I went to Mr. Walton and pointed out that this system caused the cutchra to be wet the whole day, because water was flowing along the bottom of the gully, the cutchra obstructed its progress, and it tended to keep the gullies in the filthy condition in which they have remained up to this day. I also pointed out to Mr. Walton that in a gully in Lohar Chawl—I have no doubt the gully is still in existence—that the owner had

on one side of the gully, made a raised pathway for easy passage backwards and forwards. I pointed out that that indicated a system of great value, as it showed a means by which gullies could be kept cleanly by putting two raised pathways and thus making a natural gutter which would, as a rule, be kept free from cutchra, and sullage water would be able to flow down the gully free from obstruction. Unfortunately, in those days, Mr. Walton did not care to receive suggestions from me, and, so far as I know, nothing was ever done in that way. When I offered to give evidence before this Committee, the old idea was still in my mind. I have had many years' experience of the Bombay gullies, and also the shocking experience of the gully in Vithulwady and the great failure of the drainage that occurred there. I pointed out to this Committee that there was really no necessity to have a closed pipe, which was constantly being choked up; but instead of having a closed pipe the same object might be obtained by other means. I suggested that all that was wanted was half a pipe carried up to the surface and narrowed there, to prevent the cutchra falling in. In that way the gutter could be cleaned at any time it got choked. Then Dr. Viegas examined me at length on this subject, and I am glad to say that I saw the means of closing the top of the gutter so as to keep it from view and be quite as efficient as it would have been previously. I have closed the gutter with triangular stones; each alternate stone is fixed with chunam, and the remaining ones remain loose, and have handles or finger holes fitted, so that they may be taken out at any moment. I have already said that I think Dr. Weir should have made reference to the peculiarity of the construction of this gutter. I would also have liked Dr. Viegas to have been present here to-day, because when I went there the other day he saw that I removed the cover stones without difficulty, and with regard to the remark of Dr. Weir that there was a strong smell of sewage inside one of the houses, I went into the house with Dr. Viegas to see the sewer, and he will tell you that there was not the least smell. There was in six privies, about fifty feet from this place, a very strong smell, but they were not connected with the gutter in any way. Since the last meeting I have seen Mr. James, and have spoken to him with reference to my remarks at the last meeting that I had no notion whether the catch-pit had been opened or not. He told me that it had been cleaned every two days. I was glad to hear that, and when I went there the day before I took Dr. Viegas, although the catch-pit was full of thin sludge, I could see no sand, though the cover stones had all their crevices filled up with sand as a result of the people washing their pots in the gully. There is one other remark, and I have done. As a part of my scheme, but of no necessary connection with it, I have provided three cutchra pipes which enable people to put cutchra into them instead of throwing it on the heads of people passing along the gully. I should have thought that Dr. Weir would have seen them. It

is a pity he has given no opinion about them. I would only say with regard to what I have done in house-connections that this is a development of what began in my mind many years ago. All I can say is,—see it for yourselves.

Mr. Blaney: Where do you say the smell came from? *A.*—From the privies. *Q.*—I understand that the difference between you and Dr. Weir about this smell is irreconcilable. *A.*—Irreconcilable. *Q.*—We must judge for ourselves? *A.*—Judge for yourselves.

By Mr. Bhalchandra K. Bhatawadekar: Was the catchpit cleaned at the time of Dr. Weir's inspection or before? *A.*—Mr. James said it had been cleaned regularly. *Q.*—Then, when he made his inspection it was cleaned? *A.*—Apparently. I must say that the cover-stones had not been touched, and the drain had never once been cleaned. There, was no necessity to clean it, because it was perfectly clean in the main line and in the trenches. There is no possibility of it choking, for if cutchra gets in, it is washed away. *Q.*—Do the moveable stones discharge gas? *A.*—There are twenty pipe connections and twenty gully drains in the main drain, and if there is any possible sewage smell in the drain itself, it escapes in the gully at these twenty disconnections. *Q.*—You say that at your visit with Dr. Viegas there was no smell, whilst Dr. Weir at his visit says there was a smell. Is it possible that the drain was working efficiently at your visit and inefficiently at Dr. Weir's? *A.*—Possibly. That is a matter of experience. *Q.*—There must be a hygienic fact in connection with this drain—whether it is possible or not for gases to escape within the buildings? *A.*—It is possible; but there are twenty openings in the main gully, and any pressure of sewer gas would naturally escape at the nearest point first. There is also a municipal syphon fixed between the catchpit and the drain. *Q.*—Might not this supposed smell be due to over-sensitiveness of the olfactory senses of Dr. Weir? *A.*—I cannot say; there might have been nightsoil about.

By Mr. Nanabhai N. Katrak: When you gave your first evidence you recommended open gutters, and afterwards stone coverings. What led you to make that change? *A.*—The necessity of effecting the separation of storm-water from sewage. *Q.*—You changed your mind in a short time. What induced you to do so? You say that your system was the result of many years' thinking, but in a month you changed the principle of it? *A.*—It is simply a development in my mind. I found it possible to cover the gutter, and, being possible, I recommended it. *Q.*—But you recommended open sewers because you did not think it possible to have closed sewers? *A.*—Not at any practical cost; it was a matter of cost. *Q.*—Then it is immaterial whether you have an open or a closed sewer? *A.*—By no means. *Q.*—What led you to make up your mind about open and closed sewers. *A.*—In this particular gully a stack of privies was erected in the first house upon the new municipal system of water carriage; the inhabitants being high-caste Hindus, I felt

sure that, if there was an open drain carrying nightsoil, they would not agree to it. *Q.*--This gutter was meant to carry nightsoil? *A.*—Precisely; innocuously, without smell or anything objectionable being visible. *Q.*—But you recommended this system in cases where we have not to carry nightsoil? *A.*—I do everywhere, because I think it is the best thing devised for the separation of storm-water from sewage; for even where nightsoil is not carried, a large amount of sullage, urine, and other matter from privies is carried. As we are now committed to this system in Bombay, I may as well tell you a thing which escaped me whilst I was speaking, and it is this: I have had a large experience with these privies and gullies in connection with High Court suits, and since the new Municipal Act has come into operation, it is the practice of my firm, where the Municipality insist upon privies being built to each house and where the owner of the adjoining property appeals to the High Court, to say that: provided the nightsoil is carried on the new water system, there will be no nuisance. My system of gully drains has been invented to carry nightsoil without giving offence to any one.

Mr. Nanabhai N. Katrak: I think, Mr. Chairman, you will remember that in this enquiry we have deliberately kept aside the privy question. The question of the carriage of nightsoil is not before us. Or only so far as moree connections are concerned.

Surgeon-Lieut.-Col. Banks: Is not sullage found in morees?

Mr. Gostling: There is plenty of evidence before the Committee to show that the morees are used for urinating and defecating.

Mr. Blaney: Then they are latrines?

Mr. Nanabhai N. Katrak: The Health Officer says there is two per cent. of nightsoil passing.

Mr. Gostling: Taking that into consideration, I think this is the best system devised.

Mr. Nanabhai N. Katrak: You think if the gullies were open there would be smell? *A.*—They would be objectionable.

Q.—In which way? *A.*—To sight; not objectionable to smell.

Q.—Then I understand open gulleys are not likely to smell more than closed gullies? *A.*—I mean tube drains like these. They are not likely to smell. *Q.*—But ordinary gullies? *A.*—Certainly; they stink fearfully. *Q.*—You say these open gullies smell on account of the stagnation? *A.*—The refuse chokes up the gully and it lies there until the halalcore removes it next day? *Q.*—Then it is only on account of the cutchra that you are opposed to the system? *A.*—Yes; that is the reason. *Q.*—Then if the cutchra did not cause any obstruction, they would not be objectionable? *A.*—They would, because they give no pathway for people to walk on. *Q.*—Ninety-nine per cent. of the gullies are not used for that purpose? *A.*—Make them clean, and they would be used.

Mr. Blaney: Is it not true that these are called sweepers' gullies and are used in no other way? *A.*—It is so.

Mr. Blaney: It is impossible to make them into footpaths? *A.*—If it could be done, we ought to do it.

Mr. Nanabhai N. Katrak: Why do you object to closed gully drains? *A.*—Because they continually choke. *Q.*—You believe the chokes are frequent and the delay long in clearing them? *A.*—I do. *Q.*—Supposing this cutchra nuisance was done away with, according to your idea these open gullies would have no objection, except for the sight? *A.*—You must first do away with the nuisance; privy water goes down them and smells bad. *Q.*—It passes off though? *A.*—Urine from privies always smells bad. *Q.*—Do gullies smell at present because of the faulty level; secondly, because of the faulty gradient; and thirdly, because they are made of blue stone not well polished? *A.*—What is to prevent your having a narrow drain in the middle, and the gully will drain into the gutter?

Q.—Supposing that the Committee recommended that the gullies should be paved with patent stone and given a good gradient, would they be better? *A.*—Not if they were V-shaped. *Q.*—What shape do you recommend? *A.*—I don't recommend any shape. I recommend mine as being the best. *Q.*—These covering blocks are costly things? *A.*—More costly than pipes, but not costly. *Q.*—Supposing you wanted to sewer a gully fifty feet long, what would be the difference? *A.*—About double. *Q.*—Then it is twice as costly? *A.*—So far as the gullies are concerned. *Q.*—Your objection to pipes is that they cannot be cleaned? *A.*—That is my objection. *Q.*—Your system will choke just the same? *A.*—No; it will never choke. It is six inches wide and two feet deep. *Q.*—Does it give sufficient gradient? *A.*—That is its great recommendation; there is no likelihood of it choking. The gutter has been in use six months, and, so far as I know, it has never been touched. *Q.*—You say there was no sand in the catchpit, but in the joints of the triangular covering blocks? *A.*—Yes. *Q.*—You found nothing in the catchpit? *A.*—It was cleaned every two days to prevent anything getting into the street sewer. *Q.*—You believe your scheme is applicable to the whole of the city? *A.*—Yes. *Q.*—For poor and rich? *A.*—Yes. *Q.*—With gullies and without gullies? *A.*—Yes. Here is Dr. Viegas, and he will tell you for himself whether there was any smell in the house with the side drain.

Mr. Viegas: I did not find any smell.

Mr. Blaney: What time was that?

Mr. Gostling: About 8-30 in the morning.

Mr. Blaney: After the people had used water? *A.*—I don't know.

Mr. Blaney: Did you test the direction of the air currents?

Mr. Gostling: I saw the bottom of the pipe was filled with sticks. They were perfectly clean, and the current of air would naturally go with the water. Is that so, Mr. Wallace?

Mr. Wallace: Yes, if it was a rapid current.

Mr. Gostling: Then the current would go out at the junction, at the head of the pipes.

Mr. Nanabhai N. Katrak: Are the crevices in the block closed?

Mr. Gostling: Yes. And, curiously, they are filled with bright red earth worms.

Mr. Blaney: The further development being maggots.

Mr. Nanabhai N. Katrak: They are not big enough to hold the cutchra?

Mr. Gostling: No; the crevices are the thickness of these three sheets of paper. I noticed when I took up the cover-stone out of the catchpit that there was a hole through which water ran from the surface of the paving. The next morning, when I took Dr. Viegas there, I saw the sand had filled up the hole, and no water was running there at all. Twelve hours would be sufficient to close up any small orifice there might be. For many years past there have been inventions by which you could take the cover off the top of the pipe, but for the purpose of doing that you have to dig up the paving stones and earth in order to get at the pipe, and if you are not careful, you will break it.

Q.—Are you satisfied as to the working of your cutchra shoots? *A.*—Yes; but I had an extraordinary amount of difficulty in getting the permission of house-holders to fix these cutchra pipes, because my workmen were not of their caste and they had an objection to my men, though high caste Hindus, entering their private rooms. There is a hole through the wall by which the cutchra is pushed through, and it is necessary for the workmen to go into the room to get at the hole in the wall. I have only fixed three pipes instead of six. *Q.*—The cutchra then is put through the gully? *A.*—It is passed from the room through the hole in the wall and dropped down cautiously without soiling any person. *Q.*—The cutchra must be consigned to the dust-bin? *A.*—These pipes are put in the most convenient positions where it is not possible to fix a dustbin. These cutchra pipes only measure nine inches square. The dinner refuse and so on may be pushed through the hole into the pipe and dropped down. *Q.*—There are no water pipes? *A.*—I have not attempted to make any alteration with the upright piping. I have made efficient house-connections under ground. I do not think, practically, much improvement can be made with what we have got above ground. The improvements that may possibly be made are only small matters of detail, such as covering over the orifices with gratings to prevent the cutchra from choking the syphons. I have not had the opportunity of seeing Mr. Hewson's arrangement; otherwise I should be glad to state my conclusions. *Q.*—As far as your arrangements go, you believe there is no room for improvement? *A.*—No; I will form my opinion of Mr. Hewson's suggestion when I have seen it. He has practically suggested the making of a gully inside the house, the gully being three feet wide and three feet long. It is a piece of a gully instead of a gully along the whole length of the house.

Q.—You were speaking just now of fifteen years during which the Health Officer did not suggest anything? *A.*—I said as a matter of delicacy I did not think he should have suggested any design of his own in this particular case where he was making an official report upon other people's designs. *Q.*—In matters like this the Health Officer was never consulted; are you aware of this? *A.*—I was never consulted.

Q.—He never was consulted when drainage works were undertaken?

Mr. Blaney: That is hardly a fair question to put to a voluntary professional witness.

Mr. Nanabhai N. Katrak: I do not wish to press that question, but if he had known the object of the question which follows, he would have seen the necessity for my asking the question to which Mr. Blaney objects.

Mr. Blaney: What does he know of the rules of this office?

Surgeon-Lieut.-Col. Banks: Mr. Gostling has criticised Mr. Hewson's scheme, and it would only be just to see if he would like to criticise Mr. Gostling's scheme.

Mr. Blaney: I have not done with Mr. Gostling yet.

Mr. Nanabhai N. Katrak: Neither have I.

Mr. Gostling: I have not criticised Mr. Hewson's scheme in any way; I simply stated what I understood it was and have not offered any opinion on it. I cannot understand it or criticise it till I have seen it.

Mr. Nanabhai N. Katrak: My question was with regard to the ventilating shaft which runs from one story to another. In party-wall houses there is an open space in each pipe joint just where the pipe goes up the internal surface of the wall. Do you advise that that open space should exist?

Mr. Gostling: I think that that space should not exist.

Q.—With regard to this matter, Mr. Chairman, we find that Mr. Gostling's catchpit was cleared every day regularly. *A.*—Every second day.

Mr. Nanabhai N. Katrak: And with regard to the other scheme of Mr. Hewson, he says it was not cleared for eighty-three days. Now, it is a very important question to decide whether this was really the fact or——

Mr. Blaney: We are *examining* a witness. That would be a splendid speech at the end of the whole thing.

Mr. Nanabhai N. Katrak: I have simply to address the Chairman.

Mr. Blaney: We are not addressing any one. We are here examining witnesses, and not for the purpose of making speeches.

The Chairman: Have you any more questions to ask Mr. Gostling?

Mr. Nanabhai N. Katrak: I have finished.

Mr. Blaney: Mr. Gostling has told the Committee that the form of house-connections which he has carried out in Vithulwadi is suited to all houses throughout the City of Bombay.

Mr. Gostling: Yes.

Mr. Blaney: He has also stated that these loose triangular covering blocks formed part of that system with a catchpit at the end and that this drain is never obstructed, never requires cleaning or looking after at all, which is marvellous.

A.—It must require cleaning sometimes. It has had six months' experience without being cleaned as far as I know.

Q.—But when the catchpits are full of filth or there is a deposit in them, they require cleaning, and if every house in Bombay is fitted with this kind of house-connection, every catchpit in the town will be required to be cleared every second day. *A.*—Every second day, or twice a week certainly. *Q.*—And do you propose no examination of the drains lest they get choked beyond what would be done by the bhungies in clearing them. Every catchpit would have to be cleared every second day and would entail the work of several hundreds of bhungies; and you recommend no other higher staff to superintend their operations, because I understood you to say that the natives of this city are generally unwilling to do this work for themselves? *A.*—I do not recommend any higher staff—absolutely none. *Q.*—Then you do not recommend the employment of any higher staff for constantly supervising the whole of these house-connections? *A.*—No, because when the man takes off the cover-stone to examine the catchpit and clean it, he sees the exit of the drain into the catchpit and can see whether there is any cutchra in the drain which requires to be removed. By his daily examination of the catchpit he will see whether the drain is choked or not. *Q.*—He will do all this? *A.*—It is before his eyes. *Q.*—Then you would leave the care of this great city to the bhungies? *A.*—No; but they have certain inspectors over them. *Q.*—Then there must be a superior staff? *A.*—Yes; you must have inspectors. *Q.*—So that for the proper carrying out in a sanitary manner of these house-connections even on your system there will have to be a large permanent staff and a large permanent expenditure? *A.*—A large permanent inspecting and cleaning staff. *Q.*—You have got to deal with people who will have nothing to do with it, who will take no responsibility and suffer no risks or inconveniencies; it must be done for them by others. Therefore they must pay for it, and the payment of the staff to do this will come to a very large sum. *A.*—At present the only means of cleaning these pipes when they get choked is by a system of man-holes and the use of iron rods and hooks. It is a most elaborate system; but there is no other way of cleaning the pipes at present. But with my new system practically all that will have to be seen to is the catchpits. There will be a daily inspection of the catchpits and an occasional inspection of drains which will not choke, and all I wish to say is that you will save the very large expenditure which you are at present incurring. You must have your superior staff of inspectors. I believe there is such a staff at present; but it will have to be more systematised. *Q.*—I do not know: I am not one of

the executive. *A.*—Dr. Weir recommends in his system catchpits at the end of the gullies as a *sine quâ non*, which means a certain steady, permanent expenditure ; but if you can restrict your expenditure to the catchpits, and if it is not necessary to clean the pipes to any extent, there is a very large prospective saving. *Q.*—Every restriction of expenditure means death. *A.*—So far as cleaning these things is concerned, there should not be any restriction. That has been made a great complaint: the pipe sewerage has not had a fair chance. These gully traps and pipes have been allowed to choke, but if there had been a staff to look after things, matters would have been much better. It is a want of proper, intelligent supervision that is responsible. *Q.*—Under your system of house-connections is it necessary to have any special flushing arrangements at the head of the gully? *A.*—The washing of the morees day by day is all that is wanted. Q.—Under Mr. Walton's sewerage system this flushing was recommended. *A.*—Because his pipes were continually choked. Under this system no choking is possible.

Mr. Blaney: That is all I have to ask. Mr. Gostling has certainly laid us under a great obligation.

Mr. Ardasir Mody : I understand your system is practically a combination of the closed as well as the open system of drainage.

Mr. Gostling : The pipe is really an open one, but the triangular cover stone at the top makes it a closed pipe with the advantages an open drain gives for periodical cleaning and inspection. I do away with the gully traps entirely. In construction it is an open sewer, but in practical use it is a closed sewer.

Q.—You say that this sewer is to be two feet deep at all points and it must have a gradient, so that if the gully is a long one, say forty or fifty feet, the gradient must be a very great one. *A.*—The gradient in Vithulwadi is about one and a half feet, the length of it being one hundred feet. The greatest depth at the commencement is two feet. My reason for doing this is to make a step or fall at the junction of the side drains leading from the respective morees to the middle drain. This is more complicated than the ordinary gully drain would be, for I had to consider the prejudices of those people who were deadly opposed to the nightsoil flowing in this particular drain. One foot-step at the junction is the provision upon the English system, and therefore I made the middle drain a foot deeper than I otherwise should have done, so that by no possible chance could any nightsoil from the main drain in the gully overflow into the side drains on either side and get into the people's houses. The depth is in no place more than three and a half feet, At the commencement this gully is two feet above the street-level. so the depth of the drain is only one and a half feet below the street-level, and the danger of undermining the foundations of the houses is avoided.

Q.—You know when pipes are choked the inmates are poisoned or inconvenienced by sewer gas ; then what do they do ? *A.*—I think they write to the Municipality and get an answer in a week or a

fortnight, or employ an authorised plumber who will charge them high prices. *Q.*—Is it possible for them to be poisoned for some time without knowing it? *A.*—Yes. *Q.*—Can they go to the catchpit and see how matters are for themselves? *A.*—All they have got to do is to lift up the cover stone. *Q.*—Then under your system there is the advantage of the inmates being able to ascertain for themselves whether it works well? *A.*—When they understand it, they will not object, because the surface of the gully will be clean and dry. At present the gully is so filthy from urine and nightsoil that it is absolutely repulsive for any one to go into the gully.

Mr. Blaney: Your gullies would be splashed all over with slops of all kinds thrown from the windows, even if dust-bins were provided.

Mr. Gostling: I hope gradually they will get to use the cutchra pipes. A hundred years ago you had to walk through the streets of Edinburgh very carefully because the people emptied the contents of various vessels out of their windows.

Mr. Gostling (*to Mr. Viegas*): Before you arrived, I said with regard to these cover-stones that though the invention is my own, it arose out of that strict examination you gave me. That afternoon I felt rather riled because I did not understand where you were driving to; but when I grasped your idea that you objected to open drains in gullies, I set to work on it.

Mr. Viegas: I think the credit, whatever it is, is all Mr. Gostling's. I only examined him, and if he has gained anything from that examination, it is all his own doing. I think our examination of these witnesses ought to be as condensed as possible, and therefore I will only ask two or three questions. Mr. Gostling, after what you have seen and heard here, do you still think that the old house-connections could not, with a better supervision and cleaning, be made to serve the city. *A.*—I think they will never suit the circumstances of life in this country. *Q.*—Do you think that above the gully the present house-connections will do? *A.*—I think I answered that question before: I have no objection to them. *Q.*—The only improvement that can be effected? *A.*—Is in what is underground. *Q.*—I believe the only objection you have to pipe sewers in the gullies is that they are liable to get choked and that the removal of the chokes is a difficult operation. *A.*—An extremely difficult process, and that I think is its full condemnation. A thing should be simple, easy, and cheap to keep in order.

Mr. Nanabhai N. Katrak: I think Mr. Gostling recommended a slit in the downtake pipe.

Mr. Gostling: I gave this up after hearing what Mr. Smith had to say.

Q.—Do you find it not necessary or not suited to your scheme? *A.*—I did not think it was worth troubling about. *Q.*—That suggestion must have been either a good or an indifferent one?

A.—It was indifferent.

The Chairman : I have received a letter from the Commissioner, which I will ask the Secretary to read.

The Secretary then read the following memorandum No. D-6747, dated 4th December 1893—

To MR. THURLEY.

At the House-connection Meeting on Friday, the 1st December, Mr. Hewson made a statement to the effect that no attention had been paid to the cleaning of the catchpit attached to the premises Nos. 258/66 at Bazaar Gate Street.

The undersigned was unable to refute this at the meeting for want of information at the time.

Mr. Thurley is requested to state if the statement is correct; if so, an explanation on the point should be submitted without delay.

C. C. JAMES, Drainage Engineer.

No. 2939 of 1893-94.

5th December 1893.

To THE DRAINAGE ENGINEER,
Bombay Municipality.

SIR,—With reference to No. D-6747, dated 4th December 1893, I beg to report that the statement made by Mr. Hewson is incorrect. The catchpit was attended to and cleaned on the following dates: 26th June, 17th July, 4th August, 28th August and 2nd September. On each of these occasions I personally inspected the place and seen that the catchpit was cleaned. From the 2nd September, a Saturday, I directed the Sub-Inspector of the district to have the catchpit cleaned every succeeding Saturday morning, and this has been done up to date, the Sub-Inspector personally attending. The greatest depth of silt found in the catchpit was 9 inches measured on the 28th August last.—I beg, &c.,

THOS. W. THURLEY, Inspector.

Letter No. D-6811 of 1893 from the Drainage Engineer, forwarding the above to the Commissioner.

Mr. Hewson : With reference to this, I might read the correspondence which has taken place with Mr. James in respect to these catchpits.

Mr. Hewson then read the correspondence in question.

Mr. Hewson : With reference to the Commissioner's remarks stating that I should myself have seen the catchpit was clean and not have made a complaint, I beg to state that I made no complaint as to the catchpit not having been cleaned. I simply stated a fact which it was necessary for me to do in answering the question of Dr. Katrak. I pointed out that, in order to prevent the syphon being blocked, I had provided a large grating which effectually prevented the floating sullage blocking the syphon. Personally I measured four inches of floating sullage up the grating

Whether it had been cleaned or not was a matter of no moment. It simply proved that the grating was sufficient to keep out all floating sullage from the syphon and prevent the system fouling.

Mr. Blaney: I propose we do now adjourn, and in making this proposal, I think we might come to some conclusion as to our next proceedings. For my own part I think it is desirable that we should meet next Friday and ask the Health Officer to be present and question him upon this system before we go to it. Then I think we would be in a position to personally examine the various systems.

Mr. Nanabhai N. Katrak supported and said there was still one scheme wanting, and it was immaterial whether they held over the examination of the Health Officer on one or two schemes?

Mr. Blaney: Can we visit all the places in one day?

Mr. Nanabhai N. Katrak: I don't think we can.

Mr. Blaney: We have very few questions to ask Dr. Weir.

Surgeon-Lieut.-Col. Banks: I submit that it would be an absolute waste of time to hold further meetings until something practical is done, when we can then come to some determination. What has been done to-day? You have heard a history of Bombay sewerage from the time it was first known by Mr. Gostling. I don't see what good is to be got out of that. Let us wait until there is something practical to do and then go and do it.

Mr. Blaney: That is Dr. Banks' opinion.

Surgeon-Lieut.-Col. Banks: I give it only as such.

Mr. Ardesir N. Mody: I don't think we have been wasting our time.

Surgeon-Lieut.-Col. Banks: It is a question of opinion.

Mr. Blaney: Dr. Banks wants to take the short cut. I propose that we should meet here next week, ask a few questions of the Health Officer, and then go and see something.

Mr. Banks: I am with you there, Mr. Blaney, heart and soul.

The Meeting then adjourned until Friday, December 15th.

BOMBAY, *15th December* 1893.

AT the meeting of the Committee held this day there were present:

The Hon'ble Mr. Javerilal U. Yajnik, *Chairman*; Ardasir D. Mody, Esq.; Brig.-Surgeon-Lieut.-Colonel S. O' B. Banks; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq., Furdonjee N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; A. G. Viegas, Esq.; the Commissioner; the Health Officer; the Special Drainage Engineer; the Drainage Engineer; and the Secretary.

There were also present D. Gostling, Esq.; John Wallace, Esq.; and John Hewson, Esq.

Mr. Blaney: As the Health Officer had not an opportunity of hearing the questions or answers put at the last meeting, what we should consider now is our action to-day. We have no more wit-

nesses to examine at present, and we might now adjourn and look at the experiments, taking them in the order which the Engineer might advise. This might help us to come to some conclusion. We could then adjourn to Kamathipura chawl, where Dr. Weir will explain the experiments. I notice in the report that he says that his is a system for this kind of chawl, which might be safely put down in any part of the city. It is now for the Committee to discuss what I propose and come to any conclusion they like.

The Chairman :- You mentioned on the last occasion that it was desirable to ask Dr. Weir certain questions before we adjourn with reference to the examination of Mr. Hewson and Mr. Gostling, whose evidence was hostile to the Health Officer.

Mr. Blaney : Mr. Gostling said his system would do for the whole of the city. We might ask him a few questions upon it before proceeding. We were told at the last meeting that Mr. Hewson's second experiment would be ready by to-day. Dr. Weir might tell us something about that, or perhaps we had better give him another week.

Mr. Nanabhai N. Katrak: You say, Dr. Weir, that you observed a smell of sewer gas on entering the building at Vittulwady. Mr. Gostling says the covering stones were practically air-tight.

Mr. Blaney : I don't think he said they were air-tight.

Surgeon Lieut.-Col. T. S. Weir, Health Officer, re-examined.

Mr. Nanabhai N. Katrak : I put that question particularly to Mr. Gostling, and he said they were air-tight and water-tight. Are you in a position to say, Dr. Weir, that the smell which you observed was sewer gas or due to the decomposition of cutchra? *A.*—I have no hesitation in saying that the smells were from the pipes and drains. *Q.*—Then it is possible to distinguish the smells, between smells from cutchra and sewage? *A.*—Certainly. *Q.*—How? *A.*—By the nose. *Q.*—Then for sewer gas to be given off, there must be something in the sewers to give off smells? *A.*—On one occasion I saw a deposit in the sewer. *Q.*—A deposit of what? *A.*—Of slush; semi-liquid. *Q.*—Was it due to choke, or simply sticking to the sides? *A.*—Partly sticking and partly floating. *Q.*—There was no solid substance? *A.*—Semi-solid. *Q.*—Did you observe anything that would cause choke? *A.*—There was no obstruction, but there had been obstruction, but not at the time of my visit. *Q.*—How do you know there had been obstruction? *A.*—Because my department has had to take action. I attach no importance to it. *Q.*—I understood from Mr. Gostling's remarks that choke was impossible. *A.*—My objections to the system are not based on the probability of chokes. It is on other grounds. *Q.*—The only question is that there was a complaint of a choke? *A.*—Yes. *Q.*—Can you say whether the smell came through the crevices between the stones or from the sides? *A.*—It is quite impossible for me to say. *Q.*—You write in your report "the ground-floor passage and sides, House No. 342, Shaik Memon Street, was in a filthy condition, and there was nightsoil on the passage?" *A.*—

It was no fault of the system that there was night-soil in the passage. There was a smell of sewer air and there was excrementitious matter on the floor. *Q.*—Where did you get the sewer gas? *A.*—In the passage and all round the house. When you see the house, you will understand it. To get to the passage you have to pass a passage on the groundfloor of the building, and there was a strong smell of sewer gas. *Q.*—Your objection to the system is that the sewage is not exposed to the sun and air? A.—The first objection is that the traps are open under the downtake pipe. *Q.*—Supposing they were closely fitted? *A.*—I only suppose what really exists. The opening is likely to become obstructed, and the sewer in the passage has all the disadvantages of a pipe sewer, and none of the advantages of an open gully. *Q.*—Any obstruction can be easily removed? *A.*—But there is more likelihood of obstruction than in the pipe system. *Q.*—Given a gully with a good flat surface, paved with patent stone, and a proper gradient, what do you consider the best way of getting rid of the water? *A.*—In the case of poor people the system which is least likely to become obstructed and the cheapest is the best. *Q.*—Then Mr. Gostling's system is likely to become obstructive? *A.*—It is more likely to cause danger than an open gully. *Q.*—It is a big sewer? *A.*—Yes, but you will see that solid matter adheres to the sides, and there is a tendency towards obstruction. *Q.*—You are sure that the smell was not from decomposed matter on the surface, but came from underneath? *A.*—I have no doubt about it. *Q.*—You see no advantage over the present system? *A.*—Not over the present system of pipes.

By Mr. Ardasir N. Mody: You say there is no advantage in the present system; the present system is not difficult to choke? *A.*—It is more difficult in case of closed pipes and channels. I think a choke is more likely to occur in Mr. Gostling's system, and more likely to cause danger, than in the system of open gulleys. *Q.*—Why more likely? *A.*—Because the flow in this system is not so constant or so great as in the pipe. *Q.*—The pipes are narrow. *A.*—They could be laid at a better gradient. *Q.*—But I understand you can easily remove the blocks in Mr. Gostling's system. *A.*—It is more easily cleaned. *Q.*—It does not require skilled men to clean it? *A.*—No. *Q.*—It is no fault of the system that the passage is in a filthy state? *A.*—However ingenious a system of house connections is, you may have nuisances which they cannot remove or palliate. *Q.*—That is the case in a system of open gulleys? *A.*—Yes; but for many years it was contended that if you put up pipes everything that was filthy would go down them, and you would have a purification of the city. It is no fault of the system; the evil lies with the people, and there is one remedy for all the sanitary ills that afflict us. For many years it was contended that there would be no necessity for sweepers when once the pipe system of house-connections had been adopted.

Mr. Blaney: And we based our estimates of future budgets on that ground.

Surgeon-Lieut-Col. Weir: I myself must take the responsibility to some extent.

Mr. Blaney: All Municipal Commissioners taught us that.

Mr. Ardasir N. Mody: The same trouble will occur with open gulleys?

Surgeon-Lieut.-Col. Weir: Yes; but you can see the obstruction, and people are more likely to use it as a urinal. *Q.*—That is against it? *A.*—No; if the sewers have to carry nightsoil, it is an advantage. *Q.*—Don't you think the system of Mr. Gostling is an improvement; it gives you the advantage of a closed and an open system. *A.*—It does not seem to have the advantage of an open system; obstructions are more likely to occur. If they do occur, they are more dangerous; and lastly, it is more costly. *Q.*—But it was said that obstruction was more likely to occur in the open system? *A.*—I don't think so; it is a matter of opinion.

Mr. Gostling: I would like to ask a few questions.

The Commissioner: It is quite unusual for a gentleman not a member of the Committee to ask questions.

The Chairman: I am inclined to agree with the Commissioner, and I don't think any particular good would arise. You have had your say more than once Mr. Gostling.

Mr. Blaney: Mr. Gostling has come here as an honorary professional man and given us the best of his services. I think he ought to have an opportunity given him. He might ask the questions when we visit his system. The Reporter will then be with us. I think that would be better.

The Committee then left the Municipal Hall and proceeded to visit the various experimental fittings.

Mr. Hewson's Experiment, Bazar Gate Street.

The Committee having examined the sanitary arrangements on the ground floor, Mr. Hewson made the following statement:—

This is a system without a house gully. There are six privies one over the other. Each privy is fitted with a copper pan having a four-inch outlet, discharging into the side of a copper head. The nightsoil is separated from the sullage. The four-inch pipe takes down the nightsoil into the syphon; at the bottom of the ventilating shaft. The syphon also contains another inlet which takes the sullage, which then flows into the drain. The sullage first flows into the passage where we are standing; then into the catchpit, where it is free from nightsoil. The clear sullage passes the grating into a separate inlet, into the same syphon, and then into the drain. The sullage acts as a wash-out of the nightsoil from the syphon.

Mr. Blaney: Let us see how the ventilator acts.

A lighted candle was then placed near a small hole over the door of the shaft, and it was seen that the draught was let into the house.

Mr. Blaney: Mr. Hewson had some doubt whether the Committee considered the privy arrangement was inside or outside the house.

Mr. Viegas : The question was as to the ventilating shaft.

Mr. Hewson : There is no question about the privy being inside the house ; I say the ventilator is outside the house.

The solid deposit in what Mr. Blaney described as the "cesspool of hideous proportions" was examined, and was found to be six and a quarter inches deep. A well by the side of the cesspool was visited. Mr. Gostling pointed out that the surface of the water was covered with mosquito larvæ.

Mr. Blaney said it was a cholera sink.

Mr. Nanabhai N. Katrak : Is there any likelihood that the system has been choked ?

Mr. Hewson : None. It has acted for seven months.

The Committee then proceeded to the top of the house and inspected the top of the ventilating shaft.

Mr. Blaney : Why was the ventilating pipe on the top of the shaft not carried above the tops of the surrounding houses ?

Mr. Hewson : It ought to have been done. The people above complain of smells.

Mr. Blaney : It must be dangerous to people living above ?

Surgeon-Lieut.-Col. Weir : Certainly.

Mr. Hewson : If people above complain of smells, it is a proof that the ventilator acts.

Mr. Blaney : But which way and how often ?

Mr. Viegas : If the pipe was taken higher, would there be any objection ?

Mr. Bhalchandra K. Bhatawadekar : Mr. Hewson says there would not. Do you think, Mr. Hewson, that this shaft wastes a great deal of space ?

Mr. Hewson : There is a great saving of space. The present by-laws require three feet of space all round a privy. If you have this system, you save a great deal of space.

Mr. Bhalchandra K. Bhatawadekar : The by-laws enforce three feet of space ?

Mr. Hewson : Yes.

Mr. Nanabhai N. Katrak : Why not carry the shaft itself higher ?

Mr. Hewson : You must have a ventilator on top ; otherwise there would be a down-draught.

Mr. Nanabhai N. Katrak : But the sullage would be exposed to sun and air ?

Mr. Hewson here explained that the draught downwards which had been discovered with the aid of a candle might have been caused by the air rushing in at the open door in front of the bottom of the shaft and going from there through the air inlet at the other side, thus making a sweep round.

Mr. Hewson's Second Suggestion.

This was visited by the Committee, but having only been completed recently, the Health Officer was asked to report upon it.

MR. GOSTLING'S SUGGESTION.

After a careful examination of this gulley and the system laid down, Mr. Gostling asked Mr. Weir: Where did you smell sewage? *A.*—I find it now, everywhere. *Q.*—There must be some comparison of course? What is the smell now as compared with that under the previous arrangements in this gulley? A.—Very much better. *Q.*—Then it is an improvement? *A.*—Yes. *Q.*—I removed every gulley trap because they choked so. They are the real cause of the trouble? *A.*—When I wrote my report this chunam work round the bottom of the downtake pipe had not been made.

Mr. Gostling: The chunam was put round in order to avoid choking. Any obstruction can be removed by hand and not allowed to get into the drain.

[The Committee then went into the covered passage.]

Mr. Gostling: Do you smell any sewer gas now, Dr. Weir? *A.*—Not now. (After remaining a few moments, Mr. Weir added) I find it now. It was suggested that probably what the Health Officer smelt now must be a remnant of the odour from the gully still clinging to the garments of the Committee. It was decided to go into the street and return by another passage. The Committee proceeded to do this, but on the journey encountered a large quantity of highly scented oil. They returned to the passage, and it was ultimately decided that there was a slight smell. The gutter in the gulley was then examined, and a deposit of ten inches of solid matter was found at the bottom. Experiments were made with a downtake pipe with the aid of burning paper, and it was seen that the draught was upwards.

Mr. Blaney: The cutchra shoot appears not to have been used by the people.

It was also pointed out that by the side of a downtake pipe a hole had been knocked through the house wall, and from this sullage was flowing freely, the pipe remaining unused.

Mr. Balchandra K. Bhatawadekar: Do you think, Mr. Gostling, that the solids will choke up the six-inch pipe? *A.*—It would have done so long before this if it had been likely.

Mr. Ardasir N. Mody: Where there was a pipe there was also a gully trap before; sullage flowed from the pipe into the trap which could be cleaned? *A.*—As a matter of fact we find that the gully trap chokes and won't work.

Q.—How long has this gutter taken to get this deposit in it? *A.*—Six months.

Q.—In six months more it would have choked? *A.*—Possibly.

At this stage the Committee adjourned, it being resolved to meet at Lohar Chawl at the junction of Kalkadevy Road on Friday, the 22nd instant.

BOMBAY, 22*nd December* 1893.

AT the meeting of the Committee held this day, there were present :—

The Hon'ble Mr. Javerilal U. Yajnik, *Chairman ;* Ardasir D. Mody, Esq ; Brig.-Surg.-Lieut.-Col. S. O'B. Banks ; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq. ; D. A. D'Monte, Esq. ; Furdoonjee N. Bisni, Esq. ; Nanabhai N. Katrak, Esq. ; James W. Smith, Esq., Special Drainage Engineer ; and the Health Officer.

There were also present John Hewson, Esq. ; D. Gostling, Esq. ; and John Wallace, Esq.

The Committee met at Lohar Chawl, and first proceeded to view Mr. Smith's No. 2 scheme.

MR. SMITH'S NO. 2 SCHEME.

Mr. Smith produced plans showing the principles of the scheme. The details of it have already been published.

Mr. Nanabhai N. Katrak asked if it was possible to see the sewer.

Mr. Smith said this could not be done unless it was taken up.

The gulley was entered, all the traps and pipes were found to be working, and the surface of the gulley was clean. The Committee then proceeded to the first floor of the house, examined the *nahani*, and on pouring water down the connection, it was found to be working.

Mr. Cowasji Pestonji : Do the people clean the connections themselves ?

Mr. Smith : Yes.

The inhabitants of the house were questioned, and the woman to whom the property belonged stated that they used the *nahani* connection for urinating purposes, but they always carefully flushed the pipe afterwards.

Mr. Bhalchandra K. Bhatawadekar asked her if they got any smells from the connections during the night. She replied that they did not. She further stated that the connection had never been choked ; they did not clean their cooking pots in the *nahani.*

Mr. Blaney: This is the old-fashioned scullery trap used in England for the past fifty years.

Mr. Nanabhai N. Katrak : If every one cleaned their *nahanis* so carefully, it would simplify matters.

Mr. Blaney : The syphon trap has a lesser bend than usual, and the hand can be got in.

The Committee proceeded to the second story *nahani*, which corresponded with the one below. Here, however, a woman was cleaning cooking pots.

The Committee then returned to the gulley, and some of the traps were opened and were each found to contain about a handful of sand. There was a smell of nightsoil at the end of the gulley. The stench was excessively foul, and the effluvia was carried up between the two houses.

BOMBAY MUNICIPALITY.

MR. SMITH'S SCHEME No. 1.

The Committee visited this experiment and it was found to be in working order. The privy at the end of the gulley, however, was found to be very foul. The gulley itself was clean, and the traps contained very little silt.

Mr. Smith said that theoretically he preferred this scheme, but practically he considered that No. 2 was best.

Mr. Bhalchandra K. Bhatawadekar objected to the scheme on the ground that the downtake pipe opened under each window. The syphon at the entrance of the gulley was examined. There was some difficulty in opening it, and the top of the syphon was broken in the operation. There was about 1¾" of silt in the syphon which had taken nine months to collect.

MR. WALLACE'S SCHEME.

The Committee proceeded to Shaik Memon Street and inspected this experiment.

Mr. Wallace said: The chief difference between this experiment and those you have seen lies in the fact that whilst the other suggestions are those of gentlemen interested in this Commission, the apparatus applied here are not mine at all. They are what I have seen in other countries, and which I recommend as worthy of notice to this Committee. The question to be decided was the best way of carrying sullage from the *nahani* into the gutter, and not into the sewer, and of preventing gases from the foul lining of the pipe entering the houses. It is intended to discharge the gases above the tops of the houses, and prevent them going into the gulley, and finally into the houses themselves. The means employed are a parallel return pipe and a stone laid over the orifice in the *nahani*. At the foot of the downtake pipe a catchpit was placed to act as a seal and prevent gases escaping into the gulley, then into the pipes, and finally in at the windows. In order that this experiment should show beneficial results, it was necessary that the system should be laid down in a house exposed to a reasonably pure atmosphere. At present it is put down in a gulley so foul that no difference is made by the ventilating pipes. Their action is more than counteracted by the smells which come in at the open windows. It is also proposed where possible to fix the downtake pipes in vertical lines, so that they might be cleaned by a weighted brush put in at the top.

Mr. Blaney: Has the scheme been carried out as you desired? *A.*—Yes; but there is no difference observed owing, as I have said, to the stinking gulley. The value of these inventions is not in any way affected by this trial. They are all well known methods and in use in other countries.

Mr. Nanabhai N. Katrak: In gulleys of this nature you do away with catchpits? *A.*—Yes, and with ventilating pipes. I would have nothing but the simplest downtake pipe and the stone in the *nahani*.

Q.—So it is a question of a good floor and a good gradient? *A.*—Yes; but there would always be a smell, even with periodical cleaning. *Q.*—We have decided to clean gulleys with an automatic flusher and a fire engine; will that be a good thing? *A.*—Yes. *Q.*—Has the four-inch pipe made any improvement? *A.*—I don't think so. I see no advantage in having a four-inch pipe when three-inches will carry the water. The inhabitants complained of smells in the houses.

Mr. Gostling's Scheme.

This scheme was revisited by the Committee, and it was found that one and seven-eighths of an inch ($1\frac{7}{8}$") of silt had accumulated in the drain in five days. In the passage drain there was only a quarter of an inch.

The Halalkhor Chawls.

Dr. Weir conducted the Committee to the halalkhor chawls at Kamathipura and explained his scheme. He said: This is a simple system of open drains receiving the water from *nahanis* and carrying it to an intercepting chamber or catchpit, and from there it goes to the drain. The special portion of the scheme is the open drain under the downtake pipe.

Mr. Blaney: Is the principle sound? *A.*—Yes. There is also a depression in the side of the drain where the sullage enters. There are 700 inhabitants. The privies are separate, but they are on the old system; they have been for more than 20 years here.

The privies were visited and found to have night-soil, the automatic flusher not working.

Mr. Gostling asked in what respect this arrangement of drainage differed from the system of Mr. Smith's?

Mr. Nanabhai N. Katrak: There is no drain underneath. Have you ventilating pipes, Dr. Weir? *A.*—Yes; but I attach no importance to them.

Mr. Gostling: Do you consider this scheme would be successful in a narrow gulley where cutchra is thrown down? *A.*—Yes. Where cutchra is thrown down in or on the gulley, this is a safe system.

Q.—Would you adopt it where there are privies? *A.*—Yes.

Q.—But you cannot show us how it works, because you have no privies here. If we don't see it before us, we can't tell how it works? *A.*—No.

Mr. Gostling: Here you have a large open space? *A.*—Yes; but there are probably no more crowded rooms in Bombay, for in each room there are from five to ten people, or two or more families.

Mr. Nanabhai N. Katrak: Everything is open to the sun and air? *A.*—Yes.

Mr. Gostling: Mr. Blaney advocated the same thing years ago, but it was outvoted.

The Committee then looked at the *nahanis* which are situated on the verandah outside the main building. Mr. Hewson asked that the Committee should once more visit his scheme in Bazar Gate Street. He said he had remedied the defect of the draught coming into the house.

Mr. Nanabhai N. Katrak undertook to re-examine the experiment referred to.

Mr. Hewson then asked what was going to be done with Malabar Hill, where the system of cesspools still existed.

Mr. Blaney replied that this did not come within the scope of the present Committee as they were only met to enquire into the system of house-connections generally.

The Committee then adjourned until the 5th January 1894.

5th January 1894.

No meeting of the Committee was held this day, owing to there being a meeting of the Corporation.

BOMBAY, *12th January* 1894.

AT the meeting of the Committee held this day there were present:

The Hon'ble Mr. Javerilal U. Yajnik, Chairman; Ardasir D. Mody, Esq.; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Furdunji N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Commissioner, the Health Officer, the Drainage Engineer on special duty, the Drainage Engineer.

Messrs. Gostling and Hewson were also present.

The Secretary read the following:—

MR. HEWSON'S No. 2 SCHEME.

Memorandum No. 28794, dated 5th instant, from the Health Officer to the Commissioner.

The Committee on House-connections at the last meeting requested that I would give an opinion on Mr. Hewson's No. II scheme. The scheme appears to me to be less open to objection than No. I. As it will cause obstruction in the flow of sewage between buildings, the system does not appear to me to have the advantages of a pipe system such as we have, nor yet the advantages of an open system such as there is at the Halalkore Chawls. Only in exceptional cases could a system such as this be recommended.

T. S. WEIR, Health Officer.

No 20476 of *6th January* 1894.

Forwarded to the Municipal Secretary.

H. A. ACWORTH, Commissioner.

Mr. Blaney: I am sorry that the Health Officer has not stated about what proportion of the houses in Bombay would have to be dealt with in this way. He says it might be adopted in special

cases ; most of the Committee would like to know whether the adoption of this scheme in Bombay would be extensive. Reference should be made to the Health Officer and he be asked what the number of houses is likely to be, which will be dealt with in this way. He says it might be done, and that he would allow it in exceptional cases—I suppose very exceptional cases ; but we should know about the number that can be provided by Mr. Hewson's No. 2 scheme, and in no other way. This back drainage which Mr. Hewson has been called upon to provide involves hundreds of houses in Bombay. It is a serious matter and brings us almost face to face with the question addressed to Dr. Tuiner by the Calcutta Corporation, and in reply to which he said : "The only way to improve this system is to abolish the *bustees*."

Proposed by Thomas Blaney, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That a reference be made to the Health Officer asking him to inform the Committee of the number of the houses that might, in his opinion, be provided with drainage under Mr. Hewson's No. 2 system.

"Also as to the number of houses which in the Health Officer's opinion should be provided with drainage under Mr. Hewson's No. 1 system, as referred to in the Health Officer's report, dated 23rd October 1893, first para, on page 3."

Mr. Nanabhai N. Katrak : The Health Officer in this second report has expressed his opinion against the scheme, but we don't know to what particular part he objects. House-connections means appliances commencing at the *nahani* and finishing at the running siphon, but we don't know to what part of these in Mr. Hewson's scheme, the Health Officer objects to.

Mr Blaney : Then propose a motion in the matter.

Mr. Nanabhai N. Katrak : Perhaps you will take it as a rider to your motion.

Mr. Blaney : It is another matter altogether ; some may adopt mine and not yours. This will come on after my motion.

Mr. Blaney's proposition was then *carried*.

Mr. Nanabhai N. Katrak : I move "that the Health Officer be requested to state in detail to what particular part of Mr. Hewson's schemes his objections apply and what sanitary reasons there are for taking such objection."

Mr. Blaney : It would have been very much better if the report of the Health Officer had been in our hands before we came here. I did not know it was in existence until I came to this table. I think in future we should have these documents circulated at once.

Mr. Modi: It appears to me that the Health Officer objects to the gulley and not to the downtake pipes. He states clearly the part he objects to.

Mr. Blaney: It certainly is not a complete scientific report.

The motion of Mr. Katrak was then *carried*.

Mr. Blaney: Gentlemen, before we go to any other business, I wish to state that Mr. Gostling has prepared some carefully thought-out remarks on his Vithalwady scheme, and on the Health Officer's scheme at the Halalkhor Chawls, which he would like to place before you. The way in which Mr. Gostling has tried to serve this Committee entitles him to be heard. The report which he has taken the trouble to prepare will do us no harm, probably some good, and we had better hear it.

Mr. Nanabhai N. Katrak: If it is a long report we had better have it printed and placed before us at the next meeting.

Mr. Blaney: Let Mr. Gostling read his remarks and allow them to be placed on the records. We need not vote upon it to-day; we can take our time over it. I propose that Mr. Gostling be allowed to proceed with the paper.

Mr. Gostling then proceeded to read the following paper:—

"I stated in my evidence that the experimental sewer I had constructed in the Vithalwady gulley had not been cleaned since the time it was constructed, a period of six months, and that I had just then examined it and found the sewage in it flowing freely.

"When the Committee examined the sewer in my presence, it was apparently quite clean, but when a stick was pressed into it, it was found to be filled at its upper end to a depth of ten inches with sand or silt, which had been deposited from the stuff used in cleaning the cooking pots.

"The width of the sewer being six inches and the depth of sand ten inches, it followed that at this point there was an area of sand of 60 square inches. An ordinary sewer pipe of six inches diameter has an area of 28 square inches; so that my drain was filled with sand for an area of more than double that of a pipe of corresponding size, and yet was flowing freely and without obstruction.

"The quantity of sand accumulated during the six months was sufficient to have choked up a sewer pipe three times over, for no sewer pipe will flow properly if it is more than half full of sand.

"My experimental sewer has thus given an object lesson of the greatest value. At the lower or cesspit end I had tested it with a stick, and saw that it was flowing quite clean and free from silt. It is laid with a slope of 12 inches, with an ovoid bottom of fine-dressed stone. It was expected that the scour of water would suffice to wash down into the cesspit, the sand and silt, and so keep the ovoid bottom clean. The scour is not sufficient to keep it clean, even though the slope, owing to the accumulated sand, was increased from 12 to 22 inches in the 100 feet length of sewer in the gulley.

"We know that the street pipe sewers and the main masonry sewers are rapidly filling up with silt and that, as the Municipal Commissioner stated at a recent meeting of the Corporation, a lawsuit is now being threatened owing to the new pumping engines at Love Grove not being competent to pump silt in addition to ordinary clean sewage."

The Commissioner : I never said that.

Mr. Gostling : You said something like it.

The Commissioner : Never.

Mr. Gostling : I read something like it in the newspapers.

The Commissioner : If you imagine that the reporters state what I say at the Corporation meetings you are very much mistaken, I am sure. I don't mind the remarks standing, however, if the reporter has taken a note of my objection.

Mr. Gostling : Shall I say " according to a newspaper report ?"

The Commissioner : If you like.

Mr. Gostling inserted the words " according to a newspaper report " and then proceeded to read as follows :—

" Mr. James stated at a recent meeting of the Committtee that no silt collects in a pipe drain, because the surface is glazed ; but I think facts disprove this opinion. The catchpits constructed, both by Dr. Weir and myself, will prevent sand and silt used in cleaning cooking pots from hereafter entering the sewers. This contrivance is of so simple a character, and so well known, that it is to me a mystery why it has never previously been adopted in Bombay. I can only explain it upon the supposition that, during the public discussions with me at the commencement of the now drainage works fifteen years ago, Mr. Walton, the late Municipal Engineer, committed himself to the statement that the gulley siphon traps adopted by him at the foot of each *moree* pipe rendered it impossible for sand or other heavy material to enter his sewer pipes. As it has now been established that cesspits are necessary at the junction of each gulley pipe with the street sewer, in order to intercept the indissolvable matters from entering the street sewers, it is highly important to design such a shape of cesspit as will enable the sewage and floating matters from eddying in the cesspit, and becoming foul and decomposed—a danger to the neighbourhood. This is a grave and serious matter, as I will proceed to show. When I was living 14 years ago next to the Bishop's bungalow near the Jamsetji Hospital, I was greatly annoyed, as I drove daily down the Babula Tank Road, by an all-pervading sickening stench which I could not localise. At last I discovered that it was due to a square cesspit measuring about 4 feet by 4 feet constructed in the public sewer at the north-east corner of the Babula Tank. The sewer entered and left this cesspit on its north side. The consequence was an eddy round the west, north and east sides, in which the sewage stagnated for weeks, and stank the neighbourhood out. The cesspit had, no doubt, been constructed for some experimental purpose and forgotten. I brought the matter to the notice of the Health Department, and shortly after left the neighbourhood. Dr. Weir, in his report upon our experiments, has stated, in advising for adoption the drainage system used by him in the chawls, that he recommends cesspits measuring one foot on each side. I knew that so small a size was foredoomed to failure, because it is difficult to insert a scoop for cleaning it. I was glad to notice, therefore, on our visit that he has built there much larger cesspits,

measuring 2½ feet on each side. But on examining the cesspit at the north-east corner of the chawls, I saw that he had sinned against first principles in its construction, in that the sewage enters on the middle of the south side and exits on the middle of the east side, thus causing an eddy on the west and north sides, which will lead to stagnation and stink. A cesspit to act efficiently must fulfil the following conditions:—It should be oblong in shape, *i.e.*, its length should be at least double its breadth; the sewage should enter and exit at the narrow ends, there should be a fall of at least six inches between the entrance and the exit, so as by the rapidity of the flow to scour and mix up the sludge below its surface as much as possible and prevent stagnation; it should be boat-shaped, and the corners sloped or rounded in order to prevent the formation of eddies and to secure that only fresh sewage shall flow on the surface; the bottom of the oblong cesspit should be semicircular in shape, so as to afford sufficient depth, the largest space for the settlement of the silt, and easy means of removing the whole of the same by means of my scoop; that is, there should be no corners anywhere, where anything could accumulate and stagnate, either during the daily flow of the sewage or after the occasional removal of the silt. It should also be large in size, so as to prevent the necessity of overfrequent clearing. The cesspit I have constructed fulfils all these conditions, except the boat shape, which I had not then thought of. It measures 4 feet long by 2 feet wide by 2 feet deep. Mr. James states that he had it cleared every two days. Judging from the amount of silt taken out during our inspection, I should think that if it were cleared once a week, it would be ample. Cesspits should, of course, be varied in size according to the number of houses or, rather, the number of rooms which discharge sewage into the gulley. The minimum size should be 3 feet by 1½ feet, while in some long gulleys, in crowded localities, it might be necessary to make them as large as 6 feet by 2 feet. I now come to consider the best type of drain for narrow gulleys. I need not refer particularly to what Dr. Weir has done at the chawls. He has there indicated the best means of draining open spaces, and has rightly selected open drains for the *morees*, and located the privies in an outlying space by themselves, with a separate underground sewage pipe to carry off the urine. I judge by what he stated at the inspection that the privies were designed for the nightsoil to flow direct into the pipe. Judging by the constricted water-supply with a 1-inch pipe, that portion at least is a failure; we saw that the glutinous heaps of excreta in the troughs had to be moved by hand, and unless there is a very large supply of water, with large discharge pipes, the excreta will not flow. At the mills we are accustomed to use flushing pipes of from 3 to 6 inches in diameter, the troughs being also kept full of water and the excreta floating in it. One important demonstration has been given by my Vithalvady gulley sewer. The Committee have had ocular evidence that silt will accumulate in it to a depth of 10 inches, and yet the sewage flow efficiently on its surface. With a closed pipe

the evidence of silt accumulation, though there, would have been impossible of exhibition without long labour of digging down to and breaking of the pipe. I admit that the drainage of narrow gulleys must be so modified as that no silt shall enter the drain. This necessitates the adoption, for surface drainage, of the open drain constructed both by Dr. Weir and Mr. Wallace, minus Mr. Wallace's *moree* cesspits, which, he admits, are superfluous. I would only suggest that the surface drain should be made not less than 6 inches deep by 6 inches wide with an ovoid bottom, with a narrow slit-opening at the top not more than 2½ inches wide, so as to prevent kachra, as much as possible, from falling into and choking the drain, the slit being just sufficiently wide to admit easily the edge of the flat broom for the daily cleansing. All moree pipes would discharge their contents into this surface drain, the sand would thus pass into and be retained by the cesspit, and my open underground sewer, with the moveable triangular cover-stones, also flowing into the cesspit, would be reserved for its legitimate purpose of carrying off the foul water from the privies and also of receiving the discharge of the soil for the new pattern automatic water privies which are now being constructed through the town. The triangular cover-stones would be constructed on one side of the gulley, and the surface drain on the other side, grooves being cut across the cover-stones, so that the water from both sides of the gulley would pass into the surface drain, and the surface of the paving stones be kept reasonably clean and dry. As my underground sewer is constructed with an ovoid bottom 6 inches wide by 6 inches high, when the sand is by this means kept out of the sewer, nightsoil and other dissolvable matters will pass along without difficulty along the narrow bottom of the ovoid, and the objection which Dr. Weir now rightly expresses against my system will no longer hold good. He stated at our inspection and showed that fecal matter will not flow freely along the surface of the sand and silt, but if silt is no longer admitted, fecal matter will flow without obstruction. I will conclude with one further remark. The Drainage Department have found it so essential to lay the gulley drain pipes at a steep slope in order to get an efficient scour and prevent the frequent choking of the pipes, that it not unfrequently happens that the pipe at its junction with the street is 5 feet below ground level, causing the undermining of the houses, Coroner's inquests and High Court suits. Upon my system this excessive depth can be avoided. The closed sewer being in an instant open along its whole length for examination and clearing of any possible obstruction, shallow depth is preferable, a gradient of one foot in 100 feet being ample, while in long gulleys of many privies the sewer can be made wider and of less proportionate slope."

Mr. Blaney: This report contains a good deal of matter for discussion. I think Dr. Katrak's suggestion might be adopted; that it be placed on our records and be distributed to us in order that we may discuss it at some subsequent meeting. There are a dozen matters in that report which require consideration.

The Secretary here drew the attention of the Committee to the fact that the grant for printing and reporting was exhausted and overdrawn.

Mr. Blaney : I don't think that is a breaking matter; we will survive that.

The Secretary : We want a grant all the same.

Mr. Blaney : Yes, yes.

The Secretary : Will you repeat your letter of last year to the Standing Committee ?

Mr. Blaney : The question for us to discuss is whether the expense we are incurring is reasonable and in accord with the wishes of the Corporation. If the Committee is of the opinion that what we have done is reasonable and have asked for nothing which is unreasonable, then it will be granted. The Chairman can go to the Corporation and ask for the extra grant.

Mr. Bhalchandra K. Bhatawadekar : What is the amount overdrawn ?

The Secretary : About Rs. 240 up to date.

The Chairman : If we have to ask for a grant, it should not be limited to that amount. We have to consider what the expenses will be in the future.

Mr. Blaney : If we take Rs. 500 extra, what does it matter ?

The Chairman : Mr. Barrow estimates the extra cost at Rs. 1,000 at least if it is to include the final report.

Mr. Blaney : That is a long way off !

The Commissioner : If it is a long way off, we had better ask for Rs. 2,000.

Mr. Blaney : I don't care what it is. We will only spend what is necessary.

It was decided that the Chairman be asked to address the Standing Committee and apply for an additional grant of Rs. 2,000.

The Chairman : A letter has been received from Mr. Wallace and I will ask the Secretary to read it.

27, MEADOW STREET, FORT,
BOMBAY, 12*th January* 1894.

JAVERIRAL U. YAJNIK, Esq.,
President of the House-connections Committee.

SIR,—I have the experiments on house-connections, which were entrusted to me by your Committee, well in hand, and I have already reason to believe that they will amply repay the labour and time given to them. No mention was made at the meeting of a report on this work, but if you desire to have one, I shall be glad to prepare it from the notes I am taking ; my charge for a complete report will be Rs. 500.—I, have, &c.,

JOHN WALLACE, C.E.

Mr. Bhalchandra K. Bhatawadekar : So far as we know there was no understanding about charge by experts, and if we once introduce that principle I do not know where it will end.

Mr. Blaney: The question is for the Committee: do you want the report or do you not? If you do not, there is an end of the matter.

Mr. Nanabhai N. Katrak: What about the experiments?

Mr. Blaney: What about the result? That's the question.

Mr. Bhalchandra K. Bhatawadekar: I think it was understood by the Committee that it was a voluntary offer.

Mr. Blaney: Yes; the experiments, but not the report.

The Chairman: I believe so far the experiments have been of great value.

Mr. Nanabhai N. Katrak: If there is no report we shall know nothing about them.

The Chairman: What can we know?

Mr. Ardasir Mody: At the time Mr. Wallace did not ask for any remuneration.

The Chairman: At the same time we did not ask Mr. Wallace to prepare a report.

Mr. Ardasir D. Mody: What did we ask for?

Mr. Blaney: For him to carry out the experiments.

Mr. Bhalchandra K. Bhatawadekar: But it follows, as a logical sequence, a report is expected.

Mr. Blaney: That is a matter we should have thought of when we asked for experiments to be carried out. It is all very nice to try and get everything for nothing, and we are certain to meet with the utmost amount of success in our inquiries if we carry them out in that spirit. I think it is premature to make these remarks about economy and expecting the services of professional men for nothing. With reference to this letter, it is for us to ask the expert to come, and we shall see what we are going to gain by the report. If we are going to gain nothing then dismiss the whole matter. But it is impossible to talk about principles in a matter of this kind. You have called for the experience of outside expert men who have contributed largely to the elucidation of this question and we have had the splendid examples of Mr. Hewson, Mr. Gostling, and Mr. Wallace, who come here day after day and week after week and allow themselves to be examined and cross-examined and give their views which go all over the world for criticism. I say it is almost Engineering heroism, and I appreciate it to its full value. I hope, with Dr. Bhalchandra, that we may go on getting everything for nothing, but if that is the principle of Municipal Government I do not know how the world would get on. I do not say whether we should pay for this report or not, or whether it would be setting a bad example; but there is an application in which a gentleman says he will make the report. Let us examine him as to what the value of that report will be. Here we are placed by the Corporation in this position of trust to decide and report upon certain matters, and if our report is to be of value we must have all possible information. If we have to have this report we need not put a value on it ourselves but simply ask the Corporation whether they want it or

not. We shall say to the Corporation : " This report is of value to us and we ask you to decide whether you will make compensation." It is for us to say whether it is of use. A pecuniary matter does not rest with us but with the Corporation. But to say we will not look at it———

Mr. Bhalchandra K. Bhatawadekar : I never said that.

Mr. Blaney : I am sure Dr. Bhalchandra will agree with me.

Mr. Bhalchandra K. Bhatawadekar : I shall express my opinion in my own language. I have been misunderstood. I quite agree with what Dr. Blaney has said in the main, but what I wished to convey was that this is a new principle. It is not to my mind a question of economy. I don't question the value of the expert's opinion, but what I say is that when the Committee undertook this investigation, and these gentlemen experts offered their opinions, the principle of compensation did not enter into the matter.

Mr. Blaney : Did the experts offer their services voluntarily, or were they invited ? I think they were invited.

The Chairman : That is so.

Mr. Bhalchandra K. Bhatawadekar: They kindly volunteered and it was understood that all who were rendering assistance should be on the same footing ; of course if the Corporation wish to have the report they must pay for it, but it is introducing a new principle which the Committee must consider. I don't question the value of the report at all ; that is not my point. What I say is that if the principle is introduced it should be applicable to all.

Mr. Viegas : I agree with Dr. Bhalchandra and we ought to consider the matter before we give an answer to the letter. It is highly creditable to the experts that they have so far given their evidence free, and we have considered them always as voluntary workers. I don't think it would be doing the right thing to make exceptions or establish a precedent.

Mr. Nanabhai N. Katrak: May I ask whether the Committee is competent to decide whether it can give the compensation or not ?

Mr. Blaney : They cannot.

Mr. Nanabhai N. Katrak : I think the proposal of Dr. Blaney is the right one, and I propose that the report of Mr. Wallace be accepted and the Corporation asked to grant the money.

Mr. Blaney : I don't want that. I think Dr. Katrak will agree with me thoroughly. Let us invite the expert to our next meeting and discuss the matter as to the advantage likely to accrue to the Committee if we have this report. If the evidence elicited is satisfactory, we shall tell the expert we have no power in the matter but will refer the matter to the Corporation and tell them if they want the report it can be had for Rs. 500. We can keep ourselves entirely aloof in the matter and let the Corporation decide.

Mr. Bhalchandra K. Bhatawadekar : That is putting it on a different basis.

Mr. Blaney : That is what I said at first. I propose that Mr. Wallace be requested to attend the next meeting of this Committee with reference to his letter of this date.

Mr. Viegas : I second that.

Mr. Ardasir D. Mody : Mr. Wallace might think that we have accepted the report.

Mr. Blaney : Then add that his pecuniary offer is not under consideration at present.

The Chairman : The point of Dr. Bhalchandra's objection is that we should treat all the others the same.

Mr. Bhalchandra K. Bhatawadekar : That is the point; there ought to be no exception at all.

Mr. Blaney : After the generous manner in which Mr. Wallace has come here and spent his time, I don't think that he will imagine when he comes here that we will fly at his throat and demand the report from him after the example he has given of his generosity. I don't think Dr. Mody need have any fear about inviting Mr. Wallace here.

Mr. Nanabhai N. Katrak : If you want a detailed report you must expect to pay something for it.

Mr Blaney : I quite agree with Dr. Bhalchandra that we should get everything for nothing.

Mr. Bhalchandra K. Bhatawadekar : I don't want everything for nothing. I am a professional man and always expect remuneration for my services. I was pleading the cause of the other experts ; the Chairman saw the point of my remarks. There ought to be no exception ; if one is paid they ought all to be paid.

The Chairman put the motion which was unanimously adopted.

Mr. Nanabhai N. Katrak : I think we have now before us sufficient material to enable us to consider some portion of the house-connections which we were appointed to inquire into. You know that house-connections are composed of a number of parts beginning at the *nahani* and going down to the running siphon. Between these two points the house-connections machinery might be divided into a number of things and these things might again be sub-divided, each thing going to make up a complete house-connection. If we proceed on this basis and go on considering that portion of the house-connections on which we possess sufficient information, I think we would be taking a practical step. We must discuss this machinery bit by bit, at the same time leaving our minds open to receive any information that may come before us at any future date. Therefore I say we should consider some portion of the house-connections in some localities. With that view I have prepared certain heads which, if it is agreeable to the Committee, might be taken as the basis on which to consider our report. I have begun from the end of the street sewer near the running siphon and from that I have proceeded upwards to the *nahani*. Between the running siphon and the bottom of the downtake pipe we have a complete thing to consider, that is the drainage of the surface of the gulley, and this might be divided into a number of things. Then we have to consider the houses with side-gulleys, with back-gulleys, and those without gulleys. Each forms a distinct divi-

sion. Then we have to consider the number of houses without side or back gulleys, and have the road on both sides, and having an outlet from the front. This division forms a complete question for consideration. The second portion is the downtake pipe beginning from the lower end and going up to near the *nahani*. In connection with this, we might consider the size of the pipe, cistern heads, wall siphons, the cleaning of the internal surface, and the arrangements in party-wall houses. This will give us an idea of downtake pipes; and thirdly, having come near the *nahani* we may consider the connection with the downtake pipes, on which we have already a number of suggestions, and the modifications suggested by Mr. Smith and Mr. Murzban. Then we have the ventilating pipes and ventilation in general of house-connections; and lastly the arrangement for cleaning, brushing and flushing the parts of such arrangements. If we proceed on this basis I think we can now take a practical step in framing the report which we are requested to do by the Corporation.

Mr. Blaney: Dr. Katrak has suggested enough work for six months. I am quite willing to accept his programme, because it is capable of immense improvement and despatch. I hope Dr. Bhalchandra will agree with what I am going to say. One of the questions for our consideration is not to put the cart before the horse. We may take up the consideration of all these parts of house-connections, still we must understand that any decision we may give on sectional parts is only provisional; it is when we put the whole thing together that we must have no shadowiness or disconnection in the report we shall have to present to the Corporation. What the Committee has not touched upon yet, and the work it has to begin, and what will take a great deal of time, is what will be the cost of what you are going to do, that is the cost from revenue, and again not only the cost, but the cost of maintenance and supervision. The Corporation expects you to present a complete report; therefore, we shall not go very far with Mr. Katrak's proposals before we shall find it necessary to take evidence on these two material points. The witnesses we shall have to examine will, of course, be our own officers chiefly. I merely suggest this. I don't propose to do anything now because, perhaps, that is the last part of our report. You will see that this will take about six months, and in the meantime there is no objection to beginning on the proposal of Mr. Katrak. We can begin at the next meeting and take up the whole discussion with a single point, and if we have to examine witnesses for information it can be done. We may have to examine people in order to make sure that what we have done and the recommendations we may make are strictly correct to preserve ourselves from inaccuracies in any way. We can therefore take up Mr. Katrak's proposal and put it down at any time. I think the proposal is very good.

Mr. Ardesir D. Mody: I would suggest that we should settle what we will discuss at next meeting.

Mr. Blaney: I do not think the Committee should bind themselves by Dr. Katrak's proposal. Let it just stand as a programme and be put on the file as such.

Mr. Nanabhai N. Katrak: I considered that the Committee might now take up its report, and I have endeavoured to show the advisability of discussing the report under certain heads. If the Committee wants it, there it is.

Mr. Blaney : That is all right, but we don't want to bind ourselves. We may take up the subject next week of road gutters Dr. Mody wants to read up literature on that subject.

Mr. Ardesir D. Mody : Will you take up that subject ?

Mr. Blaney : I have no objection.

Mr. Nanabhai N. Katrak : Then we begin the discussion of the report under that head.

Mr. Bhalchandra K. Bhatawadekar: We should chalk out a plan and be thoroughly prepared for next meeting.

Mr. Blaney : I think we are thoroughly prepared for the next twelve months. Roadside gutters is the subject for next meeting.

Mr. Bhalchandra : The report ought to be ready long within twelve months. Cannot the Chairman give a skeleton form ?

Mr. Blaney : Why does not Dr. Bhalchandra give us a skeleton form ? I will take any skeleton form, bones or no bones.

The Commissioner : I am afraid all the house-connections will be made before your report is drawn up.

Mr. Blaney : And be unmade again. Of making and unmaking there is no end.

The Commissioner : How long do you expect to be ? If you do not come to a decision soon, I shall leave you nothing to decide.

Mr. Blaney : Mr. Hewson has prepared a report and models of his schemes. They will occupy one meeting. I suggest that the Health Officer be asked to expedite his report, in order that it may be circulated amongst the members before next meeting. The report can then be discussed in connection with the consideration of Mr. Hewson's remarks and his two models.

This suggestion was agreed to, and the meeting adjourned until Friday, the 19th instant.

BOMBAY, 19*th January* 1894.

AT the meeting of the Committee held this day, there were present :—

The Hon'ble Mr. Javerilal U. Yajnik, Chairman ; Ardasir D. Mody, Esq. ; Brigade-Surgeon-Lieut.-Col. S. O'B. Banks; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Fardunji N. Bisni, Esq.; Meherjibhai R. Setna, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Health Officer, the Drainage Engineer on Special Duty, the Drainage Engineer, and the Secretary.

Messrs. John Hewson and John Wallace were also present.

The minutes of the meeting held on the 12th instant were signed.

Read letter from Mr. Wallace, dated 17th instant, stating that he will be in attendance at this meeting.

Read, also, letter from Mr. Gostling, dated 13th instant, asking that a day may be arranged for his attending the Committee for the purpose of answering any questions on the subject of the paper read by him at the last meeting and of considering the paper generally.

Read the the following :—

No. 30153 OF 1893-94.

BOMBAY, 17*th January* 1894.

TO THE MUNICIPAL SECRETARY.

SIR,—With reference to your letter No. 10349, dated the 13th instant, I have the honor to submit the following replies to the resolutions of the Committee :— I (A)—In my opinion, the system could only be justified in cases in which it was not advisable to have a catchpit near the street end of the gully. The groups of buildings to which the system is best adapted are those in which the gullies meet at right angles, as, for instance, in the gullies selected by Mr. Hewson for his experiment. (B) —The objections I have to the system are (1) the position of the catchpit between dwellings, for I do not think it can be justified, the construction of a catchpit which is a cesspool between dwellings, when it is possible to have a catchpit, further away at the extreme end of the gully and, therefore, at the greatest distance from dwellings. A catchpit, such as there is in this system, must be a cesspool and manifestly such a cesspool should be at the greatest distance from dwellings. There are other objections, but they are secondary—such as the flat gully along which the sewage is carried back to the catchpit. This is what I meant by interruption in the flow of sewage in my former report, that the sewage was carried, not directly and by the shortest way, away from dwellings, but back to a catchpit or

"The number of houses that might be provided with drainage with Mr. Hewson's No. 2 System."

"The number of houses that should be provided with drainage under Mr. Hewson's No. 1 System."

cesspool from which it flowed to the street sewer through a pipe underneath the gully. II—The only case in which the system can be justified is a case in which it is not possible to have a catchpit outside the building and in which there had been constant obstruction of the house drainage. Finally, to summarize my objections, they are to the positions of the catchpits or cesspools which are so situated that they may, through decomposition of the foul organic matters, injure or depress the health of the people living in the dwellings so drained. So long as there is another position, a catchpit or cesspool cannot be justified inside or in close proximity between dwellings. The other features of Mr. Hewson's schemes are secondary. I may take this opportunity to point out a misapprehension in the interesting statement Mr. Gostling made on the last occasion to the Committee. The latrines in the Halalkhor chawls are not on any new system: they have been constructed for more than twenty years. They are the latrines of the old Halalkhor chawls, which were pulled down; they are what are known as Macfarlane's Trough Latrines. I may also point out that I have not, as Mr. Gostling thought, advocated catchpits 12×12, but catchpits *not less* than 12×12.—I have, &c.,

T. S. WEIR, Health Officer.

Mr. Blaney: It seems to me that the answer of the Health Officer as to Mr. Hewson's Nos. 1 and 2 schemes is that it would be most rare exceptions on which he would allow it. You must remember that one of your recommendations as a Committee, will be that, whereas in former years the Engineer did what he liked, he will now take the sanction of the Health Officer to lay any particular system at any particular house after an actual consideration of the circumstances of the case. If you make such a recommendation as that, it will be carried and introduce a new feature, namely, throwing the responsibility on the Health Officer—the right and proper authority. Here we come now after spending ten, eleven, or twelve lakhs in house-connections, and we find that the whole thing is *de novo*. Some may say who is to be hanged. There is no one to be hanged. The Engineer is not the proper man in this respect; he has put down good systems and such things, but he is not responsible for the bad system. The responsibility must in future come on the proper persons. With regard to this last report of Dr. Weir on Mr. Hewson's scheme, he has not written it so clearly as he might have done. He says it would be on the rarest occasions he would allow Nos. 1 and 2 to be laid down, and only then when he is driven in a corner and could get a connection in no other way. I am sorry he did not try and make some rough estimate of the number of houses which are in this condition —those that Nos. 1 and 2 will have to be applied to. According to my knowledge of the City, it will be a very great number indeed, and will, when we come to the question of cost, be a matter for serious consideration. We shall not know how to recommend the Corporation unless we have gone into the full details.

The Health Officer examined by Mr. Blaney.

Q.—The Committee have come to the conclusion that, if they have read your report aright, it would be a very rare exception that you would allow Mr. Hewson's Nos. 1 and 2 systems to be used? *A.*—Certainly. *Q.*—This Committee, so far as it sees its way at present—I don't say we have come to anything final—will put the responsibility for special systems of house-connections upon the Health Officer—the same responsibility which the Act places upon him for the erection of privies, that is to say, on all future occasions when any deviation from the system, as recommended by this Committee, becomes necessary, the matter will be referred to you and require your absolute sanction before the Engineer can carry it out. He is only the executive of the system; you are the responsible head. It gives you another position, and one you have not occupied before. Now, as to the question of Nos. 1 and 2 of Mr. Hewson, you say it will be put down on very rare occasions? *A.*—No. 2 certainly. *Q.*—Well, we wanted some rough estimate as to the number of houses that would have these Nos. 1 and 2, because it goes to the bottom of our financial recommendations when we come to sum up. If there are many hundreds of these houses sewered on this system, they would require a deal of supervision? *A.*—I would recommend No. 1 only, when it was found other systems had failed. *Q.*—Is the number likely to be 10 or 1,000? *A.*—I don't know. I hope some other device will be found sufficient to remove the obstructive matters which Mr. Hewson's system will intercept. *Q.*—Your objection is that the gases will pervade the houses; in ordinary times they will produce illness, and in case of epidemic might have disastrous consequences? *A.*—Yes; I might recommend it where leaves are extensively used, as in the case of Buniahs and where there are frequent obstructions of a pipe system which other systems have failed to remedy. These are the only cases. *Q.*—Under one section of the Act, however disastrous the state of affairs may be, the Engineer cannot interfere. Nightsoil may run in tons into the open gutters from crowded chawls and be a terrible source of nuisance and the whole street perfumed with it, and yet the Engineer cannot take action, because there is no section of the Act which enables him to put in a pipe and minimise the nuisance. But there is a section giving the Health Officer power when the nuisance is likely to be a source of disease, as in the case I showed you in the 6th Kamathipura lane, to interfere? *A.*—I think the Municipality ought to have the power and be supported in doing the work. *Q.*—But you can in the case of extreme danger go in and say, "I recommend this to be done for the sake of public health." The law allows it, or ought. *A.*—Unless the Engineer is supported in doing so, he would run great risk to himself. *Q.*—But the Health Officer can? *A.*—I am continually making recommendations. *Q.*—There is one section of the Act which places you above the Commissioner, the Engineer and every one—

they are obliged to consult you. If you say a certain danger exists and is a serious one, it is the bounden duty of the head of the Executive either to carry out the remedy you propose or go at once to the Corporation and say there is a necessity for the alteration of the law. Here we have been for months hammering away at this question and that nightsoil is untouched? *A.*—There is section 37, clause *f*, of the Act, but the Magistrates have refused to take my evidence. They say that my evidence or that of any other Municipal officer is inadmissible. They have refused to hear me when I have come forward as a witness, and the Solicitors say they are right. Therefore, if a nuisance exists, not only must the neighbours complain, but also come into Court.

Mr. Blaney: This is a serious question. Here is this great Municipality which has just passed a budget of 86 lakhs of rupees; yet our Health Officer must see people dying by thousands and cannot go into Court to give evidence, nor can the Executive take action. That state of matters calls for immediate remedy. There is an end to the Act. The Health Officer and all the rest are humbugs. It is one of the most serious and dangerous things that could occur. I don't know where the head of the executive has been, not to come before us and let us get the matter remedied by Government. It is monstrous; we are nobody, the Executive is nobody, nobody is nobody. If the law is not a law of common sense, we are all in a false position. This point is of such importance that the matter should not be shelved by the Corporation or any one else.

By Mr. Nanabhai N. Katrak: *Q.*—Dr. Weir, do you consider that silt and sludge lying in a catchpit is a source of danger? *A.*—Certainly. *Q.*—Is it a greater source of danger if it contains nightsoil? *A.*—Yes; it is more offensive. *Q.*—Will the gases generated in a catchpit always remain there or be diffused? *A.*—They will be diffused. *Q.*—Irrespective of currents? *A.*—They would be affected. *Q.*—Gases may be diffused if the air is still? *A.*—Certainly. *Q.*—With regard to the ventilating shaft, is it likely to be a source of danger or a source of security? *A.*—The ventilating shaft put in a position in which it is not likely to be a nuisance would be of advantage. *Q.*—But this ventilating shaft of Mr. Hewson's? *A.*—I look upon it as a source of danger; it carries odours from the cesspool, and they go in at the open windows and are diffused. *Q.*—Where are the openings near the doors and windows? *A.*—On the Boyle's ventilator. *Q.*—There are openings from the house to the privies? *A.*—There are openings from the shaft into the house. *Q.*—There are communications with the privies? *A.*—Yes. *Q.*—What do you think of the direction of the currents. Are they likely to be in one direction? *A.*—They depend generally on the degree of temperature. *Q.*—Boyle says it will only be in one direction? *A.*—He cannot evade the well-known laws controlling the diffusion of air. It depends on temperature; that is the elementary law.

Mr. Blaney: If there was a cook-house and a great fire next the privy, up would go a rapid current; and if there was not, then the current would go down.

Mr. Nanabhai N. Katrak: *Q.*—What about the temperature in the sewer? *A.*—That is a different question; here you have got causes which are not in the sewers. The temperature caused by people living in a house act as an attractive force to the gases generated in the catchpit.

Mr. Blaney: *Q.*—Then each house is a ventilator? *A.*—Yes.

Mr. Wallace: I have had some correspondence with Mr. Boyle, and I have never succeeded in getting him to state by what means he gets his current. There are only two causes which can produce a current in a pipe: either it must be warmth, or a current of wind must pass the top. I have explained to Mr. Boyle that in India the indoor temperature and the outdoor temperature are frequently equal, and very often the difference is so slight that a very slight circumstance will alter the direction of the current in the ventilator, and that the top arrangement, which depends upon the wind, cannot act here with the same success as in England. I cannot get Mr. Boyle to the point, and I think his ventilator owes much of its success to the climate in England.

The Health Officer: At the old *Bombay Gazette* Office we had to disconnect the pipes intercepting and notwithstanding the intercepting chambers, I found that, when the machines were working at night, the gases were attracted across the open space into the heated atmosphere of the machine rooms.

Mr. Nanabhai N. Katrak: What is your experience with regard to the temperature in the closed sewers? *The Health Officer*: *A.*—I have made a series of observations, but at the moment I don't remember the results.

Mr. Nanabhai N. Katrak: I can tell you that the temperature was lower in the sewers than outside.

Mr. Blaney: Dr. Weir's observations were, like mine, made in a masonry sewer. What we have to do with now is the 6″ and 9″ pipes. I am sorry to say the Engineering Department have never made those experiments.

Mr. Nanabhai N. Katrak: Is it likely to be lower or higher?

Surgeon-Lieut.-Colonel Weir: You may have a higher temperature in a room by people bathing and using hot water.

Mr. Nanabhai N. Katrak: But is the temperature in the sewers lower and higher as the seasons change? *A.*—Yes.

Mr. Hewson's Statement.

Mr. Hewson said: Mr. Chairman and Gentlemen,—At your inspection on the 15th December 1893 of my system of drainage at Bazaar Gate Street, one of your Committee said a model might be prepared. I have followed up this suggestion, as I was not sure that two most important novelties hid from sight, were clear to your minds. I have prepared two models marked Nos. 1 and 2. No. 1 shows the premises No. 183—185, Bazaar Gate Street, as now existing, pre-

pared to a scale of four feet to one inch. I will show you the *inside* of the ventilating shaft and the connection from the catchpit to the sewer. This 4" pipe, coloured red in the corner of the ventilating shaft, is a vent for the hot air and gases which generate in the pipe drain and sewer. The other pipes and sullage heads in the ventilating shaft carry the soil from the six privies into the syphon. This horizontal black line shows you the position of the 6" iron pipe laid underneath the house. Red color represents the flow of sullage clear of deposit and nightsoil to the sewer. Yellow color represents the 1-foot bed of cement concrete which encircles the iron pipe. Now what I claim as a most important novelty is the discharge of hot-air and gases from the pipe drain and sewer just below the top of the ventilating shaft. Page 71 of these proceedings gives the gases found in the sewers as carbonic acid, sulphuretted hydrogen, carburetted hydrogen, and ammonia sulphide. Now some of these gases are lighter than the atmosphere. In appendix, page 96, "Sanitation of Bombay," you will see that the temperature in the sewer is greater than the atmosphere. The gases and hot air pass, by the laws of gravity, through Boyle's patent ventilator, promoting an up-draught in the shaft. The up-draught is further promoted by the sun on the pipe and Boyle's patent ventilator itself. You will notice that my plan of vent to the sewer prevents all down-draughts and is in keeping with Mr. Baldwin Latham's suggestion, page 56, "Sanitation of Bombay." He says: "Such a system of ventilation, consisting of admitting large volumes of pure air into the sewers at one or more points and allowing it to escape again as foul air at other points, is a system that every precaution must be taken to guard against. Every sewer having an open outfall must be protected against the admission of currents of air, and what is required in all street sewers is a number of vents that shall maintain the air in equilibrium within and without the sewers. Means must be taken to prevent currents of air from passing in either direction through the sewers, as these currents are controlled by the wind, and in sweeping a long length of sewer the air becomes foul. The best way of forming the vents necessary for maintaining the air of the sewers in a proper state will be by means of shafts or pipes. The ornamental shafts used for this purpose in Bombay do credit to their designer, and by an extension of such a system. and by the simple pipes carried up the houses, or ornamental iron columns erected at the street kerb where there are no houses. In some cases the hollow iron telegraph and telephone poles would serve the purpose." I would now point out to you what to my mind is an important arrangement in the soil connections. The usual connection from a privy in England and this country is by a syphon pan and a 4-inch pipe to the drain. In 1891 the water-closet pipe at my apartments in Cornwallis Gardens, Hastings, blocked. It took three days for the plumber to clear the obstruction by opening up the pipes. By my arrangement the soil passes into a head from each privy, and any obstruction can be cleared in a few minutes by this ladder

supported by planks resting in recesses in the ventilating shaft at the level of each floor. The other important novelty is in the syphon at the bottom of the ventilating shaft. This model No. 1 is too small to show this clearly; so I have prepared model No. 2 to a scale of 1 inch to 1 foot. This illustrates the syphon. B receives the nightsoil. A receives the sullage clear of solids and washes the nightsoil through the syphon at D. C is the vent to the pipe-drain and sewer. Four days before your inspection at Bazaar Gate Street,—that is, the 11th, 12th, 13th, and 14th of December,—there was no water-supply in the tank, and the nightsoil was washed through the syphon by the sullage without any smell. In appendix, page 95, "Sanitation of Bombay," Dr. Weir in the last para. of his report, 6th November 1886, says: "I do not think the emptying of nightsoil into the drains at junctions of drains and sweepers' gullies is practicable. It would create a most serious nuisance—a nuisance that would be protested against. I believe it is impracticable." Now, gentlemen, at Bazaar Gate Street I have proved to you that nightsoil can be passed into the drain from a building having no sweepers' gully without any nuisance and cannot fail under more favourable circumstances where there is a gully. This is a most important novelty, and I wish to impress it strongly on your minds, for this places you in a position to carry out the able advice of Mr. Baldwin Latham in pages 61 and 62, "Sanitation of Bombay." He says: "The fæces under the Halalcore system are received in baskets and subsequently collected in baskets in as dry a state as possible, and after being so collected are mixed with water—in one instance with sea water as well as fresh water. They are eventually flushed out of tanks into the sewers in order to get rid of them. I cannot speak too strongly against such a disgusting and unsanitary system. Under it you have the daily accumulation of dangerous organic matter, often near, or in very close proximity to, the habitation, then the collection and carrying off of this matter by men and women who ought to be engaged in some more noble occupation; and again you have the cartage of the material through the streets to the disgust of the sensitive public, and lastly, the repulsive operation of men entering the tanks that receive the fæces and mixing them with water. Now all this vile business can be at once dispensed with if every house is connected with the sewers and these solid matters are distributed in detail over the whole system of sewers instead of being admitted wholesale at particular points of the system; and by the abolition of this system a very large sum of money would annually be saved, which is now expended in the collection of the fæces only of the population." Yes, a very large amount would be saved. In my opinion 75 per cent. of the cost of the present halacore system could be saved, and 25 per cent. should be diverted to the cleaning of catch-pits. In these proceedings Dr. Blaney said the question before you was not one of expense, but of life and death. Gentlemen, you avoid both by my system, and can go to the Corporation and show that your enquiry has not only resulted in a perfect system of

house connection drainage, but a saving of over a lakh a year. Gentlemen, with your permission I will now speak to the objection to my system. The first objection was from Dr. Katrak, who said: Would not a stick, like a pencil, pass the grating and obstruct the syphon? I said it would pass the grating, and I now point out that this could be prevented by having one grating behind the openings in the present grating, but I would not advise this till experience shows its necessity. The second objection is contained in Dr. Weir's report of 23rd October 1893. I have told you that the fouling of the privy seats was due to the riots. This ventilating shaft is not under a verandah. There was a smell from the shaft, and Dr. Weir told you, at your inspection on the 15th, that the complaint came from the tenants on the top floor. I purposely requested Mr. Smith, the Special Drainage Engineer, to keep the ventilators low to secure this complaint, which was my only proof that the ventilating shaft was working. This pipe has been lengthened 12 feet, and there is now neither complaint nor nuisance. It is not quite correct for Dr. Weir to say there is a cesspool inside the house, the smell of which is concentrated and carried up in front of a verandah. It would have been more correct to say there is a catchpit at the bottom of a ventilating shaft, the smell of which is carried up the shaft. Now, I would point out that this catchpit differs very materially from a cesspool. Nightsoil and urine are not supposed to enter it. The catchpit only takes the sullage which during the day is kept fresh by the inflow of fresh sullage which passes into the drain; this would cease from, say, 8 P.M. to 6 A.M., and during this time decomposition would take place and gases generate in a mild form (seeing there is no nightsoil in the sullage) and flow up the ventilating shaft above the roof of the building. Dr. Weir says the system would be right in a few special cases, and a glance at Laughton's survey plan will show you there are 64 houses in Bazaar Gate Street having no gullies and I suppose direct communication with the drains, and there are hundreds of similar houses in other parts of the city. In answer to Dr. Katrak, Dr. Weir said: "I would suggest that the drainage from the house flow into a pipe discharging into a catchpit in front of the house." Mr. Gostling's system has shown you that such a pipe would become simply an elongated cesspool for generating gases which would flow into the house. A cesspool at the front door would always be a source of nuisance and throw out deadly gases during the night. You will please notice that my system deals with the most deadly part of sullage—nightsoil and urine—and passes it into the drain direct and is not allowed to spread and mix with the sullage, but goes at once into the drain. The next objection was the inrush of air from the ventilating shaft through the fresh air inlet into the building. This was due to a rush of air down the privies and has been stopped. You deputed Dr. Katrak to make an inspection after this down-draught had been stopped, and I think he will tell you that the ventilating shaft is now acting perfectly and that the action of the shaft, instead of being intermittent, is now constant.

Mr. Nanabhai N. Katrak: On the 5th January at 10 o'clock in the morning I accompanied Mr. Hewson to the Bazaar Gate Street house. I put a candle-light at the opening on the eastern side-wall of the shaft where on the previous inspection we placed a candle. There was a great wind blowing and the flame of the candle did not keep steady, and it was difficult to determine whether the current was inwards or outwards; so we resolved to try the smoke test inside. Mr. Hewson went into the ventilating shaft and put a tub, on which he stood with burning paper in his hand. I closed the door from the outside, and Mr. Hewson says he held the paper near the opening. I did not see any smoke coming out of the opening. We went upstairs, and I found at the top story that the ventilating tube, which previously was a little above the tank, had been raised to a greater height than on the last occasion. I was requested to smell the Boyle's patent, but not being accustomed to going up scaffolding, I did not go up. Mr. Hewson went up, and he said he smelt the gas. On coming downstairs I found one of the downtake pipes was directed out of the house on the third story. On enquiring of Mr. Hewson, who enquired of the *mistry*, we learned that there was a choke at a particular story and the *mistry* had shoved the pipe out of the house into the gully.

Mr. Hewson, continuing his remarks, said: I now come to Dr. Weir's report of the 5th January 1894 on my system No. 2. He says my system does not appear to have the advantages of a pipe system such as we have, nor yet the advantage of an open system such as there is at the Halalkhore Chawls. Gentlemen, to my mind it is of the utmost importance that Dr. Weir, with his great professional attainments and large experience as Health Officer of this city, has actually had constructed a system of house-connections at the Halalkhore Chawls in Sooklajee Street, which he offers you as a standard measure of excellence. Dr. Blaney has already remarked to the Commissioner that there is a great similarity between Dr. Weir's and my system, but I will prove to you that my pipe and open channels have greater advantages than Dr. Weir's. For comparison you must assume that Dr. Weir's system carries 2 per cent. nightsoil and the whole of the urine from 700 people (which it does not, there being a separate connection for the privies). You will find at page 84 of these proceedings Dr. Weir says: "Probably 2 per cent. of nightsoil passes into the house drain, I suppose, through the gully trap; if no drain, then over the gully and the whole of the urine." Dr. Weir told Mr. Baldwin Latham (page 61, "Sanitation of Bombay,") that 186 tons of nightsoil were collected. 2 per cent. of this would be 3·72 tons flowing over the gullies, making total nightsoil 189·72 tons. Dr. Lumsdaine, late Sanitary Commissioner, in his report to Government in 1883, gives a fixed standard of 2·5 ounces of nightsoil, 40 ounces of urine, and 8 ounces of ablution water in privies per head per diem; therefore, estimating the quantities of urine by the nightsoil, 189·72 tons, there would be

3,642 tons of urine flowing over the gullies. Now what does my system provide; it passes the nightsoil and urine direct into the drain and does not allow it to flow over the gullies, but only the bath water and sullage from the nahanis. Dr. Weir's system provides for 2 per cent. nightsoil, and all the urine to flow into his open channels, mix with his sullage and both pass into his catchpits, there to decompose, especially from 8 P.M. to 6 A.M., and throw out gases that would flow into the adjoining dwelling rooms instead of above the roof of the house. Dr. Weir's masonry channel has no advantage, but a decided disadvantage, over the V-shaped drain, because they more readily carry the sand and ash and floating substances in the sullage to the catchpit, instead of allowing it to be swept off the surface of the gully as in my system. Dr. Weir has no provision for keeping floating sullage from passing into his pipe drain. Dr. Weir's system gives no ventilation to the pipe drain and sewer. Regarding Dr. Weir's further report of 17th January 1894 (A), there would be no advantage in having the catchpit near the street; its position must be at the privies so as to prevent the deadly part of sullage, nightsoil and urine spreading; this must be passed into the drain at once.

Regarding (B). My system No. 1 has no gully whereby you can place the catchpit at a distance. I say my catchpit is justified, as by the ventilating shaft I secure the flow of gases that may arise from the catchpit passing above the roof of the house. The second para. of B appears to apply to system No. 2. I say that the most deadly part of sullage—the 2 per cent. of nightsoil and urine—is carried by the most direct and shortest way to the sewer and claim that it is a decided advantage that the sullage from nahanis should pass into the drain without coming in contact with the nightsoil and urine from privies. This sullage only flows once over the surface of the gully and is of great advantage in flushing the syphon, and there is no disadvantage in its flowing in a pipe under ground a little longer way to the sewer. I claim you cannot improve on the position of my catchpit, but there may be an advantage in having them cleaned once a day. With regard to the cost of my system, the copper soil-pans inside the privies, costing Rs. 16-8 each, can be replaced by stoneware which may cost Rs. 3 each; the copper soil heads and iron pipes may be replaced with stoneware at a much less cost, the shaft preventing them from breaking. The stone paving of the gullies are relaid and the 6″ pipes re-used; only the gully syphon traps are thrown out. Section 250 of the Municipal Act and Section 56 of the Building By-laws require 3 feet open space all round a privy; the ventilating shaft will only take, including walls, 3′-3″ × 4″, thereby saving 72 square feet of open space which would be most valuable in small tenements. I estimate the cost of the ventilating shaft would be 50 per cent. less than a building requiring 3 feet open space. A ventilating shaft should be required by the Act to every house in

the city, and this could be arranged without materially interfering with the structural part of the building. I would advise you to have one universal system secured by clear and defined lines under the Act. Dr. Weir, in his report of the 23rd October 1893, has given you most dangerous advice in suggesting that different systems should be adopted according to the view of your Engineer in consultation with himself. This simply means dire confusion.

I have proved to you that my system will effectually drain a building without a gully as the house in Bazaar Gate Street; that it will also drain three houses with gullies at right angles as you will see by this plan at Mody Street and Mint Road; also houses having back gullies or side gullies.

I have just prepared plans for a house having no gully just at the back of the old Police Court. By this ground-plan you will see that the set-back for street improvement shown by scored red lines has cut off all the privies from the building and that the only space in which they could be built is next to Police Court lane 5'-3" from one of the main walls. This is the ground-plan and sections of proposed privies. There is yet one most important question of house drainage not yet considered by this Committee, and that is the drainage of buildings outside the drained part of the city, *viz.*, Malabar Hill, Cumballa Hill, Parel, and Mahim. Dr. Blaney says that the drainage of these buildings is not within the resolution of the Corporation, but to prove that my system is universal and may be extended to these outlying districts, I would explain, by model No. 2, that the nightsoil would pass into a basket or a grating similar to that seen by you in part of my system No. 2 in Mody Street. The sullage would pass into the catchpit and the clear sullage flow over the wear through the grating into a syphon discharging into a pipe connected to a cesspool having perforated sides and bottom, which would allow the sullage to sink into the soil; any gases forming in this cesspool would flow back up this vent pipe. If you cannot deal with this suggestion, the Municipal Commissioner may, and I shall, be happy to render him any assistance I can.

Mr. Blaney: I consider Mr. Hewson's paper, which has occupied some time, has well repaid us. He has, with the assistance of the model, made his system very clear. I am sorry similar models of the other schemes are not provided.

(*Mr. Hewson* here presented the models to the Committee and was thanked by the Chairman.)

Surgeon-Lieut.-Colonel Banks: It would be advisable to have models of the other systems when we go before the Corporation.

Mr. Blaney: I think the models are necessary. I propose "That the Drainage Engineer be asked to have models of the experimental drainage systems prepared at as reasonable a cost as possible."

Surgeon-Lieut.-Colonel Banks: I have much pleasure in seconding that.

Carried unanimously.

Mr. Blaney: We may now ask Mr. Wallace to give us some information as to the value of his report to this Committee. I must apologise for an error I made on the last occasion when I said Mr. Wallace proposed to undertake these experiments. Mr. Wallace proposed nothing of the kind. I would ask Mr. Wallace to state what results are likely to follow his report and whether it is one the Committee ought to have in considering their own report.

Mr. Wallace: Mr. President and Gentlemen,—The remarks which Dr. Blaney has just made renders my task a good deal simpler. The letter I sent you, and which was read before the meeting to-day, demands some explanation, and I shall endeavour to be as brief as possible. I was one of three professional witnesses who undertook to give evidence to this meeting at an early stage of the enquiry. I made certain suggestions concerning experiments, which I thought important, to illustrate the principles upon which the construction of the house-connections should be carried out. The meeting did not hear of this suggestion of mine for about 15 months after it was made, and I have reiterated my opinion as to the importance and necessity for carrying them out. I proposed that they should be carried out by the Engineer of the Municipality. It was made a condition that I should carry them out in person, and it struck me as a little peculiar that I should be asked to carry out such experiments. I can only imagine that the work involved must be unknown to this Committee. It is the kind of work generally entrusted to a specialist. I agreed to look after the experiments, and when I went down to the Water Works, I was astonished to find that no special person had been deputed by this Committee to watch over the experiments and check my figures and see that everything was done exactly as represented. As matters stand, it is within the power of any person in this Committee to question the accuracy of my observations. It is necessary, in order that the experiments should have their full value, that the results should be incontrovertible and that every movement and operation shall have been checked by a responsible and competent person, so that, however opinions upon the result or application of these experiments may differ, there shall be absolutely no doubt about what the experiments were and what took place. This I consider very necessary, particularly as all the members of this Committee are not professional men. In order to give you some slight idea of these experiments, I shall give you one or two figures resulting from what I have done.

(Here Mr. Wallace gave, roughly, some of the results of his experiments.) Continuing, Mr. Wallace said: Now, Sir, I don't see how any one can devise a scheme of house-connections and determine their operations and the escape of gases, without such data. This is the work I have in hand at present.

Mr. Blaney: It is now for us, after hearing Mr. Wallace, to consider whether this report is likely to be of value. Before I ask

the Committee to decide, I will put one question to Mr. Wallace. Is there in any book on sewerage or sanitation containing the data you are going to put before us ?

Mr. Wallace : I would not have given myself this trouble if, by referring to a book or half a dozen books, I could have got the data. I have not only had to make the experiments, but the instruments.

Mr. Blaney : Do you believe the information will be valuable to us ; you are an expert, we are laymen.

Mr. Wallace : I think it is not only not possible to devise the best means for getting rid of sullage and sewage, but it is not possible to make a proper report at the end of the deliberations of this Committee, until such evidence is forthcoming.

Mr. Nanabhai N. Katrak : So far as I understand, it seems that Mr. Wallace's experiments are intended to give some data which will enable the Committee to determine the size of pipes, usefulness of syphons or otherwise, and the value or otherwise of the ventilating shafts you are using.

Mr. Blaney : And automatic flushers.

Mr. Wallace : The matters I have referred to show what small quantities of water will get rid of an obstruction if put in suddenly.

Mr. Nanabhai N. Katrak : There are the three important uses to which the report of Mr. Wallace can be put. Mr. Wallace has given in a rough way some idea as to the conclusion to which he may come, but the question to be decided is, is the report only of a momentary value; is it for this Committee only ? Such a report would be of use to all cities and must remain the property of the Corporation for all time.

Mr. Blaney : That goes without saying.

Mr. Nanabhai N. Katrak : Hence it is absolutely necessary not to be content with what you have heard, but to have the report.

Mr. Ardasir D. Mody : Has any sum been spent on the experiments ?

Mr. Wallace : About Rs. 50.

The Chairman : There is a balance ; shall we go to the Corporation to sanction this amount ?

Mr. Blaney : No.

Mr. Viegas : I think the question should be decided at a fuller meeting.

Mr. Blaney : Will Dr. Viegas guarantee a fuller meeting ?

Surgeon-Lieut.-Colonel Banks : It is about the fullest we have had for some time.

Proposed by Meherjibhai Rastamji Sethna, Esq., seconded by Cowasji Pestonji, Esq.—

"That Mr. Wallace be requested to furnish the Committee with a special report on the result of his experiments on the terms mentioned in his letter of the 12th instant, the cost, Rs. 500, to be debited to the balance of the Rs. 10,000 sanctioned by the Corporation in their resolution No. 6231, dated 8th September 1892."

Mr. Ardasir D. Mody : Dr. Bhalchandra's objection was that if we paid one expert for his evidence, it might be necessary to pay other experts.

The Chairman : Other experts have not asked for anything.

Mr. Meherjibhoy R. Sethna : We are going to spend lakhs and crores of rupees, and it is important to have every information.

Mr. Ardasir D. Mody : When experts gave their evidence, it was understood there should be no pay.

Surgeon-Lieut.-Colonel Banks: This is a special case. *Mr. Ardasir D. Mody*: Personally I don't object, but it forms a precedent. If Mr. Wallace had said anything at the time, it would have been different. *Mr. Wallace* : Let me explain. If I had got the Rs. 1,000 spoken of to carry out the experiments, I should have had much more than Rs. 500 for the report. The Committee evidently imagined that the experiments involved much more outlay than they really do. There is no masonry and very little outlay. *Mr. Viegas* : Then we don't go to the Corporation ? *The Chairman* : No. *Mr. Viegas* : Last time it was settled that we ought to go. *Mr. Blaney* : But we find we have a balance. When shall we get the report, Mr. Wallace ? *Mr. Wallace* : Within one month. I beg that the whole of the experiments be repeated under the supervision of an officer who will understand what is done and will be able to check the figures. Then there will be no question about what has taken place.

The motion was *carried*, the votes being 5 *for* and none *against*.

On the motion of T. Blaney, Esq., seconded by Cowasji Pestonji Esq., it was *resolved* :

"That the Commissioner be requested to depute a competent officer to observe the repetition of the experiments which Mr. Wallace is about to make in connection with house-connections."

Resolved : "That the thanks of the Committee be tendered to Mr. Hewson for the models of house-connections which he has presented to the Corporation. That these models be handed over to the care of Mr. Smith, Drainage Engineer on Special Duty."

The meeting then adjourned until Friday, the 26th January 1894.

BOMBAY, 26*th January* 1894.

AT the meeting of the Committee held this day, there were present:

The Hon'ble Mr. Javerilal U. Yajnik, Chairman; Ardasir D. Mody, Esq.; Brigade-Surgeon-Lieut.-Col. S. O'B. Banks; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Fardunjee N. Bisni, Esq.; Meherjibhai R. Sethna, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

H. A. Acworth, Esq., I.C.S., Commissioner; the Health Officer; the Drainge Engineer on Special Duty; and the Secretary.

John Wallace, Esq., was also present.

The minutes of the meeting held on the 19th instant were signed.

Read the following:—

BOMBAY, *January 22nd*, 1894.

To H. W. BARROW, Esq., Secretary.

DEAR SIR,—I herewith enclose you a copy of a letter which has just been addressed to my firm by our Clerk of Works at the Jacob Sassoon Mill, and which gives interesting and important information upon the practical difficulties which are being met with in using privies with water carriage upon the new Municipal system.

2. You will notice that, in order to get rid of the mass of stones and cotton waste, it has been found necessary to break the pipe.

3. It appears to me that the only way to meet this difficulty is that drains from privies with water carriage should be fitted with open sewers closed with triangular cover-stones upon my new system, by which means any accumulation of foreign matter could at once be cleared away without in any way damaging the sewer.

4. You will understand that these privies were being constructed shortly after my experimental sewer was constructed, and that my firm are not allowed to construct this sewer in any privies, as the matter is at present in an experimental stage.—Yours truly,

D. GOSTLING.

JACOB SASSOON MILL,
20*th January* 1894.

MESSRS. GOSTLING AND MORRIS, Architects.

DEAR SIRS,—On Thursday last, at about 10 a.m., I found that the outside pipes of the latrines were choked up, and the water and soil were hardly running through them. I thereupon got the pipe, where the late catchpit work is going on, broken, and on flushing the pipe found a bucket-full of small stones, mill waste yarn and some new cops. Upon inquiry I learnt that low-caste people engaged in the mill use the stones instead of water to clean themselves, and most part of the cotton waste and new cops are used by the women when they are "sick."

It would be better if some steps are taken in this direction, so that labourers using the stones and women using the waste and cops may be taken hold of and punished.—Yours obediently,

COOVERJI MUNCHERJI MESTRI.

BOMBAY, 25th *January* 1894.

H. W. BARROW, Esq., Municipal Secretary.

DEAR SIR,—With respect to Mr. Gostling's letter of the 22nd instant, I believe the water-closets at the Victoria Station are often blocked with cotton waste by the G. I. P. Railway employees, involving the breaking of the pipes and a most intolerable nuisance in cleaning. I do not agree with Mr. Gostling that the cotton waste and stones should pass into the pipe drain, but be prevented by a fine copper wire grating similar to that used by me for several months at Bazaar Gate Street. Stoppage by cotton waste and stones could be cleared from the Bazaar Gate connections in a few minutes as explained by me at your last meeting without any breakage. See the inside of ventilating shaft, model No. 1, and the arrangement of the ladder passing from stage to stage at the level of each soil head.—Yours truly,

JOHN HEWSON, A.M.I.C.E.

Read letter No. 22838 of 1893-94, dated 25th instant, from the Commissioner to the Secretary, as under :—

SIR,—Referring to your No. 10933 of 22nd instant, I have the honor to request that the House Connection Committee will apply to the Corporation for sanction to the payment of Rs. 500 to Mr. Wallace referred to in the first resolution quoted by you, and which is clearly not covered by the sanction conveyed in Corporation Resolution No. 6231 of 8th September 1892. That sanction applied to the cost of certain schemes for experiments distinctly enumerated in the preliminary report of the Committee, which was approved in the resolution, and equally distinctly alluded to in the resolutions of the Standing Committee recommending the expenditure. Each of the schemes was described verbally and by drawings in the schedule attached to the preliminary report, and the Corporation sanctioned nothing except what those schedules contained. On page 7 of the schedules is the description of Mr. Wallace's scheme, which ends by stating that he recommended experiments to test the force of currents of air and gas, and the cost of the experiments which have since been made on the basis of that recommendation may be held to be covered by that reference. But not one word is said as to fees to any one, and I do not think it was ever in the mind of the House Connection Committee, or of the Standing Committee, or of the Corporation, that the sum voted or any part of it was to be applied in payment of fees. I am myself quite clear upon the subject,

and as the experiments were originally proposed and sanctioned solely upon my recommendation, I may be supposed to have some knowledge of the intention with which they were proposed. It is plain that I must, under these circumstances, hold that there is no budget grant, under section 131 of the Municipal Act, for meeting the proposed payment to Mr. Wallace, and I shall be unable to pass it in the absence of specific sanction by the Standing Committee and Corporation, which I request may now be applied for. At the same time it seems to me that there will be some difficulty in asking for sanction in this case, seeing that other engineers, who, like Mr. Wallace, volunteered to give evidence, have favored the Committee with long reports for which no fee has been demanded. In my judgment the best plan will be to apply for a round sum for payment to the unofficial engineers generally, who have assisted the Committee, out of which the present fee might be paid to Mr. Wallace.

2. With regard to the second resolution quoted in your letter under reply, I have the honor to say that Mr. James is the only officer who could be deputed to make the observations contemplated and that he has numerous and heavy duties to perform of far greater importance, but that instructions have been given to him to attend for the purpose so far as his duties will permit. On the question of comparative importance, I may mention that all the Municipal Engineers with any drainage experience—Mr. Marzban, Mr. Smith, and Mr. James—appear to be sceptical as to these experiments being of any practical value, and the fact that the data which they are intended to give are not to be found in any text book (*vide* page 28, proceedings of 1st December 1893) seems to justify this doubt. If they had been really useful, they would long ago have found their way into every text book on drainage.

3. I have asked Mr. Smith to have models of the experimental house-connections prepared.—I have, &c.,

H. A. ACWORTH, Commissioner.

Mr. Blaney: The first point in considering the letter of the Commissioner, is the subject of the resolution we passed at the last meeting, in which Mr. Wallace was asked to furnish the Corporation with a report and that he should be paid Rs. 500 for doing so. The Commissioner is a member of this Committee, and all that it was necessary for him to do was to have given us the benefit of his advice at the time, when the sensible view he takes now would have been adopted. Dr. Bhalchandra was, at the time, of opinion that the resolution was something like favouritism, and was in favour of giving an honorarium to all. But as no proposal was before us, no action was taken. Now, however, the Commissioner puts it in such a clear manner that I heartily approve of it. I would ask that our resolution be withdrawn and something like the following substituted :—"That the Corporation be asked to pass an amount of Rs. 1,500 to be paid as an honorarium to the three engineers who have come forward to assist the Committee in this enquiry."

The Commissioner : I do not think the amount enough ; it should be more.

Mr. Blaney : I am merely dealing with the suggestion. I confess myself that it would look bad that one engineer should be offered an honorarium, where all have done such good service on this most important question, and I agree with the Commissioner that the honorarium should be offered to all alike. It is only a question of withdrawing the resolution and fixing the amount, although I do not think that any monetary consideration we are able to offer would be equal to the value of the time the gentlemen have given, and also allowing themselves to be examined and criticised.

Mr. Bhalchandra K. Bhatawadekar : I raised the same point, but was misunderstood. I said it would be an invidious distinction to remunerate only one of these gentlemen.

Mr. Blaney : I would have agreed with Dr. Bhalchandra if he had proposed an amendment.

Mr. Bhalchandra K. Bhatawadekar : I quite agree that the services of these gentlemen should be recognized ; but I think it should be done at the conclusion of the deliberations of this Committee. I would not commit myself to any amount.

Mr. Nanabhai N. Katrak : I said the other day it would be a graceful act to give some remuneration to the engineers as a mark of our appreciation, and said that this was an opportune moment for doing so. So far as these gentlemen are concerned, their labours are over. Now we have to consider their schemes, and it is better before we go into details to recognize their services. We do not know when the Committee will end their labours ; it may be in two months or two years, and at the end of that time we might forget everything about it.

The Chairman : I think we would like to hear the opinion of the Commissioner on the subject. *Mr. Nanabhai N. Katrak* : If Dr. Bhalchandra hesitates to name a sum, we may send it to the Standing Committee to decide ; they might give us some idea of the amount. *Mr. Meherjibhai Sethna* : They might put it too low. *Mr. Blaney* : It is only an honorarium ; it is not intended that it should be adequate payment. *The Chairman* : It is not an assessment of their services. *Mr. Viegas* : I think we are to pay the sum agreed upon to Mr. Wallace for a special report. It is not his services in attending meetings that are to be remunerated. I do not think it necessary, simply because we have agreed to pay for a special report, that we should remunerate the services of each of the experts. I think the payment to Mr. Wallace is a special case for a special service, quite distinct and apart from the services rendered by the other gentlemen. Whatever honorarium we may pay to these experts, it will fall far short of what it should be, and I think the best thing to do is to acknowledge their services by a vote of thanks. *Mr. Nanabhai N. Katrak* : The payment to Mr. Wallace has been shown to be illegal. *Mr. Blaney* : Dr. Viegas was not here when the Commissioner's letter was read. *The Commissioner* : My opinion on this matter is worth no more than that of any other

member of the Committee. I agree in thinking that opinions may differ as to the value of the evidence given by professional men who have appeared, but there can be no doubt that they have given a great deal of their time to the Committee and that their advice, be it good or bad, was the best advice they had to offer. Week by week they have spent an hour or two at this Committee, and I do not think you could offer less than Rs. 1,000, and if any recommendation is made it should be for Rs. 3,000. I think Rs. 500 would be altogether too insignificant for the amount of time and trouble they have devoted to the subject. *Mr. Meherjibhai Sethna* : I do not think Rs. 1,000 would be a very large sum, and I do not think the Corporation would begrudge it. *Mr. Blaney* : I wish to make one remark which would perhaps have come better from the Municipal Commissioner, and it is this : All these three experts have not given us English book knowledge ; they have all spoken from actual personal observation and experiments made in Bombay. Hence their evidence is doubly valuable. I am not prepared to speak lightly about their advice—it may be good ; it may be bad—but they are educated experts, observing the circumstances under which people live and the manners of the people. That is the information they have laid before us.

Brig.-Surg.-Lieut.-Col. Banks : I am very willing that the experts should be remunerated, but I agree with Dr. Bhalchandra in thinking that it would be more desirable that the matter should stand over until the Committee cease their labours.

Mr. Nanabhai N. Katrak : We have simply to remunerate the efforts of the experts and the spirit that has actuated them ; as to the evidence, some may think it valuable, others may think it is not, and this is one reason why we should consider this question now and not wait until the report is prepared. Some of us may not be present after the election to consider this matter.

Proposed by Thomas Blaney, Esq., seconded by Nanabhai N. Katrak, Esq.—

"That the resolution passed by the Committee on the 19th instant, on the proposal of Dr. Meherjibhai Sethna, be rescinded, and the following resolution passed in place thereof :—

"'That the Chairman be requested to ask the Standing Committee to recommend the Corporation to make a grant of Rs. 3,000, to be paid in honoraria to Mr. Gostling, Mr. Hewson and Mr. Wallace for their valuable services to this Committee.'"

Mr. Blaney : The Commissioner agrees with the motion entirely. *Mr. Balchandra K. Bhatavadekar* : The impression will be that this Committee is no longer in need of the assistance of the experts. *Mr. Blaney* : The explanation will be this ; they came in the first place voluntarily, and if wanted they will come again voluntarily. *The Chairman* : We can well understand that, as they came forward in the first place to give their evidence voluntarily and with such public spirit, they will do so again. *Mr. Ardasir D. Mody* : When the motion was put last time I opposed it.

Now it again comes up and we are to recommend a large sum. *It* was understood at first that the services should be voluntarily given. *Mr. Blaney*: That is true, but they have not asked for anything. *The Chairman*: It is to mark our appreciation of their services. *The Commissioner*: You ought to give them something. *Mr. Sethna*: How can we expect men of their stamp to come here from time to time and give their services for nothing. They could not have imagined that the Committee would last so long. Dr. Mody is perhaps led away with the idea that Doctors go from house to house looking for cases and are prepared to give their services voluntarily.

The motion was then put and *carried*, Mr. Ardasir Mody and Mr. Viegas voting against it.

Mr. Viegas: The previous resolution is rescinded. The report of Mr. Wallace will not now be forthcoming. *The Commissioner*: Oh yes, it will. *Mr. Viegas*: Dr. Blaney has proposed that the former resolution be rescinded, and the resolution referred to is about the special report; is it not? *The Chairman*: Yes. *Mr. Viegas*: Then I have nothing more to say; the special report will not be forthcoming. *Mr. Nanabhai N. Katrak*: Yes, it will. *Mr. Viegas*: But the Rs. 500 will not be paid. *The Chairman*: No. *Mr. Nanabhai N. Katrak*: The Commissioner is sceptical about any good coming out of the report and has no officer available to supervise the experiments. *The Chairman*: Instructions have been given to Mr. James. *The Commissioner*: So far as his duties permit. *Mr. Blaney*: I quite agree with the Commissioner asking Mr. James to be present as frequently as possible for his own benefit and the advantage of his own department. I still say, however, that the officer to verify these experiments is the Health Officer, for, finally and after all, the health of the City depends upon him. He is the officer to verify the experiments; it will not take much time. The Health Officer occupying such a post could not wish that such experiments should go on behind his back and that an expert should afterwards come and say, so and so is the case. I can conceive a Health Officer running as hastily as possible to see the experiments and to verify them. The Commissioner says, because the matters are not found in text books they are not likely to be of value. That is an illusion, pure and simple. There is a lot of things connected with Indian sanitation and the habits of the Indian people that have yet to find their way into text books. To refresh the Commissioner's memory, I may say that no engineer ever read anything in text books about sticks in privies until the matter was demonstrated here. It was not in text books that women scoured their *chatties* with sand and that it silted up the sewers, but we had that experience and we are getting the experience. I would not commit myself to the opinion of the Commissioner whilst these experiments are in course of progress. I would wait until the matter is complete and judge it fairly.

The Chairman: I suppose the Health Officer will undertake the duty? *The Health Officer*: I should like to be present and see the experiments. *Mr. Blaney*: That is all we ask. *Mr. Cowasji*

Pestonji: I think it is the engineer's duty. *Mr. Blaney*: I would suggest that Dr. Cowasji attend the experiments; he lives at Dhobie Talao, which, above all places in the world, is in need of experiments. *The Commissioner*: These are experiments on physical forces to be made by an engineer, and an engineer is the right person to verify and observe them. *Mr. Blaney*: But Dr. Weir will also go. The Commissioner's original nomination holds good. *The Commissioner*: What the Committee asks me to do is to depute a competent officer. These experiments are not on sanitation, but as to certain physical forces by an engineer, and an engineer is the proper person to observe them. *Mr. Blaney*: But you have no objection to the Health Officer being present? *The Commissioner*: No, but the report will be made by Mr. James. *Mr. Blaney*: Then your first nomination holds good. *The Commissioner*: Certainly; but the Committee understand that any assurance from Dr. Weir, or Mr. James, must come through the Commissioner. I cannot have any direct orders to any officers under me except through me. *Mr. Blaney*: I hope the Commissioner will go to the experiments. *The Commissioner*: Certainly. *Mr. Blaney*: I shall go! To see stones shot out of a syphon is something. *The Commissioner*: I shall go, just as I have gone to the Polytechnic in my youth, to see a ball dance on a column of water, and have paid my twopence to do so.

The Chairman: We must proceed to another item—the consideration of the heads.

Mr. Nanabhai N. Katrak: At the last meeting but one I laid before you the heads I have given in the paper which has been circulated, and in placing them before the Committee I have said that the Committee might take up the consideration of the report under these heads. At the suggestion of Dr. Blaney, I have added several recommendations for consideration to the number I first put in. I have studiously avoided saying anything about the order in which they shall be discussed, so that practically, the Committee are not bound to anything given here. They can take up the heads they choose at any time they like, although I would like to preserve the order.

In accordance with notice, it was proposed by Nanabhai N. Katrak, Esq.—

"That the headings under which the details of the enquiry in connection with house-connections should be considered shall be as follows:—

1. From the running syphon to the lower end of the down-take pipe—
   - (*a*) houses with side gulleys and with back gullies;
   - (*b*) houses with back gullies only;
   - (*c*) houses without side or back gullies, but with roads at both sides;
   - (*d*) houses without any side or back gullies and without any outlet except from the front.

2. Downtake-pipes—
   (*a*) size ; (*b*) cistern heads ; (*c*) wall syphons ; (*d*) cleaning of the internal surface ; (*e*) their arrangement in party-wall houses.
3. Connection of the down-take pipes with *nahanis*.
4. Ventilating pipes and ventilation in general.
5. Any arrangement about cleaning, brushing and flushing of all or any parts of such connections.
6. Consideration of the financial aspect of the recommendations."

Brigade-Surgeon-Lieut.-Col. Banks here called attention to a clerical error in the proceedings of the last meeting. The word "sometimes" he said should have been "general" in the evidence given by Mr. Wallace on the indoor and outdoor temperature of houses.

Mr. Blaney : As to considering the question of running syphons, I think we must wait for the report of Mr. Wallace, or we will not be able to decide ; otherwise I have no objection to the paper put in by Mr. Katrak.

Mr. Nanabhai N. Katrak : I have avoided saying that the heads shall be discussed in any order.

(The motion was then *carried* unanimously.)

Mr. Nanabhai N. Katrak : As the minutes are before us, I should like to say that, on the last occasion, I expressed a desire to put in the temperatures taken by Dr. Weir and given in the "Drainage and Sewerage of Bombay." There is a reading showing what the temperature is likely to be in different seasons.

Mr. Blaney : Dr. Weir's observations were made in Arthur Crawford's main sewer, which runs between Church Gate Street and the Mint ; that sewer is out of use. That was Russell Aitken's system for taking storm-water and sewage. The sewer is 8 feet high, for I have walked in it, so that the observations by Dr. Weir ——they were made for a Committee considering the sewers, because the idea in Arthur Crawford's mind was that the storm-water could be carried in the sewers——were made in the 8 and 10 feet sewers. But what would be of the greatest consequence and interest to this Committee is the temperature in our 6 and 9 inch drains and not the 8 and 10 feet sewers. I think that in India and in England, in India certainly, all temperatures of sewers should be taken at night when the sun is not shining on the surface. I do not think the question will become one of any great consequence to this Committee when we formulate our report. As Mr. Katrak has only referred to Dr. Weir's and Mr. Hewson's remarks, I only make this statement to show that the matter is not of much consequence. We have got sewers in Bombay into which the mills put boiling water, bake-houses also put in boiling water. Then there are those who micturate in sewers, and they put in water at the normal temperature of 99½°.

Mr. Nanabhai N. Katrak : I fully agree with the force of Dr. Blaney's remarks. My object was to show one thing, namely, that Mr. Hewson's ventilating shaft was designed on the assumption that the temperature was higher inside than outside. I want to show

that the temperature would not be always higher in the sewer than outside. Here, however, is one instance in which it was higher. If a 6 or 9 inch sewer was running full of water at a reduced temperature, then it is more likely to be lower in these sewers than outside. These readings of Dr. Weir's are intended to show that the assumption of Mr. Hewson would not hold good in every case.

Mr. Blaney : Dr. Katrak always admires a strong position and I will make his position stronger. Instead of these imaginary temperatures elsewhere, let him go and make the experiment in that sewer at the spot where the ventilating shaft is erected.

Mr. Wallace : I should like to add a point or two to what has already been said. The temperature of the sewers is the principal factor which determines the rate of putrefaction of organic matters. The temperature in England is about 30° less than in Bombay, and consequently there would be a corresponding difference in the time in which the matter would putrefy. The higher the temperature the more rapidly must the sewage be removed in order to prevent it from harming the population. This is of the first importance, and it is one of the reasons why we must not altogether accept European notions on sewerage, the difference in temperature being so great. The difference between the temperature of the surface and the sewer depends upon the depth of the sewer. At a certain depth normal temperature exists and it does not vary. Observations have been made at the Colaba Observatory on the temperature at various depths in the ground, and Mr. Baldwin Latham took temperature in various sewers in February 1890. The sewers are alternately warmer and cooler than the surface of the ground, and the seasonal fluctuation of temperature under ground lags behind that of the surface, in some places to the amount of several months; all these matters have to be kept in mind in observing the temperature of sewers.

Mr. Nanabhai N. Katrak handed in the following extract from the report of the Special Commission on the Drainage and Sewerage of Bombay, 22nd January 1878 :—

"APPENDIX A (10).

(*Put in by Dr. Weir, see page* 49, *17th November.*)

Temperature.—In the Laboratory, before I went out to inspect the Marine Street Sewer at 1-10 P.M., 84°.

In shade opposite the Dockyard at 1-30 P.M., 89°.

In sewer under the manhole opposite the Brigade Major's Office, by which I entered, 87° at 1-35 P.M.

Near junction with main sewer opposite the Co-operative Stores, 84° at 1-40 P.M.

In the sewer beyond the first manhole about a quarter of the way to the next manhole to the north, 85° at 1-50; further on in the middle of space between second and third manhole, 86° at 2-5 P.M., which it has remained since the last observation.

Temperature.—At the junction of old and new sewers opposite Town Hall, and alongside the manhole, 85° at 2-15 P.M.

" Under the manhole at same point, 84° at 2-20 P.M.

" In shade opposite the Brigade-Major's Office, 88° at 2-35 P.M.

" In sun at same point, 94° at 2-45.

"Readings of a thermometer hanging in my office during the time I was in the sewer :—

At 1-35 P.M., 86°
" 2-55 P.M., 86°
" 3-20 P.M., 86·5° "

The Chairman: We must now have some draft report for consideration and must ask some gentleman to prepare it.

Mr. Bhalchandra K. Bhatawadekar: That is what I proposed. Some gentleman might be invested with the duty, and he might bring the draft up at the next meeting.

Mr. Blaney: I think that is impossible and impracticable. We have just passed a resolution of Mr. Katrak's, in which there are 20 or 25 heads for discussion, and there are 45 or 55 more I will undertake to say, and, if necessary, I will bring them up in their proper course. What was proposed in Dr. Katrak's motion was to take up item by item and for a Committee to formulate their decision on it. They will go on thus and eventually formulate their report. Take one particular item: before we can vote upon it we shall have to recall experts and Municipal officers.

Mr. Nanabhai N. Katrak: I propose that we begin at head No. 1—"Houses with side gullies and with back gullies." With regard to this, I would again proceed from the end of the sewer, the running syphon to the end of the downtake pipe. The first question is with regard to the running syphon. In the mass of evidence we have had before us, most of the experts examined are in favour of the syphon—Mr. Gostling, Mr. Hewson, Mr. Smith, Mr. James and Mr. Wallace—and the only opposition was from Dr. Weir, the Health Officer. He was examined by the Commissioner and was asked this question. *Q.*—But, assuming you abolish your syphon, you have no water seal at all between the grating which leads to the open and the sewer which conveys the sewage of one thousand houses. You, nevertheless, think it is more dangerous to protect buildings by means of a water seal than to leave it open and the smell from one thousand houses to come right up the gully? *A.*—Putting it as you do now, I say it would be better to have a syphon. But when he was put another question and asked if it was not possible to use a flushing arrangement with a syphon, he admitted that, if that was done, he would have no objection to the running syphon Taking the opinion of the experts and officers of the Municipality, it is that a syphon is a necessity and Dr. Weir would have no objection to it if it were provided with a flushing arrangement. I am of opinion that a syphon would be, if

not a real security, a sense of security, and I propose that a running syphon should exist. The idea given by Mr. Wallace of the facility with which syphons can be flushed with a certain head of water gives us a strong position with regard to the running syphon, and I propose that, in the case of houses with side gullies and back gullies, a running syphon be provided.

It was agreed to proceed now with 1 (*a*) as above—"Houses with side gullies and with back gullies."

Mr. Nanabhai N. Katrak proposed "That a running syphon be placed between the street sewer and any arrangement for carrying off the water from the nahani."

Rider proposed by Thomas Blaney, Esq., "That Mr. Smith be asked to furnish the Committee with the details of the establishment that would be required for inspecting and maintaining running syphons in perfect order."

This rider was accepted as part of the motion.

The Commissioner, who had been absent from the table during this discussion on syphons, on returning, asked: Is this proposition for running syphons, in one particular case only?

Mr. Blaney: Yes; in the case of houses with party-walls.

The Commissioner: I do not think you will find that the running syphon will be dispensed with. I would not allow a house drain to be made without such a provision.

Mr. Blaney: Would you not like a man on permanent duty to clean it?

The Commissioner: I should like to have a man in my office to clean my inkstand, but we have to consider what is practical in this world.

Mr. Bhalchandra K. Bhatawadekar: Would you enforce a syphon against the report of this Committee? *The Commissioner*: Yes. *Mr. Blaney*: If the Executive are going to take charge, I think we had better bid them good evening. *Mr. Bhalchandra K. Bhatawadekar*: I think it is perfectly useless to sit here; we have a mandate from the Corporation to report on house-connections. *Mr. Blaney*: We ought to thank the Commissioner for telling us here what are likely to be the difficulties with the Corporation. *The Commissioner*: Section 231 of the Act empowers—

Mr. Blaney: In our report we may ask to have the law altered.

The Commissioner: Then I shall have nothing to say; but as the law stands, the responsibility is on the Commissioner and no resolution of the Corporation could divest the Commissioner of it. I consider the abolition of the syphons would constitute a serious danger. I have said over and over again, that no resolution of the Corporation would or could induce me to allow an arrangement which would endanger human life.

Mr. Blaney: We intend to ask Government to say that the Health Officer shall be asked his advice by the Commissioner, a position which the Health Officer is now denied. Then the Corporation would allow that the Commissioner should have his present right, because we would know that what he did would be done on the best authority available, which we do not know now.

The Commissioner: I merely call your attention to the law; get it altered and I have nothing more to say; but as Legislative Councils move somewhat slowly, probably I shall then not have the pleasure of coming to this hall.

Mr. Blaney: I have seen every drainage system in the world put down in Bombay.

The Commissioner: Then I am sorry for the City and for Dr. Blaney, because there are drains over a hundred years old.

The Chairman: Are you agreed on this proposition as to the syphons.

Mr. Blaney: We are a long way off yet. We have to consider the Health Officer's objection to them.

Mr. Wallace: There is a considerable misapprehension on the subject of catchpits. Dr. Weir objects to the running syphon—not to the masonry, but its contents. It may contain 10 or 15 cubic feet of matter. The time it takes to get full is determined by the rate at which foul matter gets in, so a large running syphon might contain very foul matter which is offensive. If the syphon is made small enough, I do not know of any other system which one could propose to take its place, and I think the Health Officer would then be satisfied with it. His objection is to the contents and not the receptacle. Up to now, I have never heard of any substitute for a running syphon. It intercepts all matter which it is not desirable should go into the sewer. The difference of opinion is more as to the form of the running syphon than as to its actual existence.

Mr. Blaney: I should like to ask the Health Officer how often the syphon is to be cleaned, and what means there are of doing so. *Mr. Nanabhai N. Katrak*: I think Mr. Smith might answer that. *Mr. Blaney*: Mr. Smith might answer and give us his advice, but as the objector was the Health Officer, we had better hear what he has to say. We might ask Mr. Smith how often it should be cleaned. *Mr. Smith*: A running syphon is a different thing to a catchpit. *Mr. Blaney*: Dr. Katrak proposes the adoption of a running syphon. *Mr. Smith*: A running syphon in some instances may be in use for years and never require cleaning during the whole of the time. *Mr. Blaney*: Does it mean the intelligence of the people in the house? *Mr. Smith*: To some extent. *Mr. Blaney*: You do not find many intelligent people; they do not, as a rule, care whether the thing exists or not. The question is, how often are these running syphons to be cleaned; they are provided with the grating. *Mr. Smith*: There is an inspection inlet. *Mr. Blaney*: If it is found choked, it has to be cleaned; you do not know unless you take off the lid. *Mr. Smith*: Yes, we would, because the pipe sewer would not work, and the gulley traps would be choked. *Mr. Blaney*: Would you consider it a sanitary system to have no supervision at all? *Mr. Smith*: No. *Q.*—Then every house would have its running syphon. There are 30,000 houses. How many people would it take to supervise them? *A.*—I cannot say at a guess. *Mr. Blaney*: That question should be sent to him. Therefore I propose that Mr. Smith inform this

Committee about the number of establishment that would be required in the event of the running syphon being put down. *Brigade-Surgeon-Lieut.-Col. Banks*: Is that not premature? *Mr. Blaney*: Perhaps so, but it is better to give him one question at a time. We should not overburden his department by asking a long string of questions at one time. *Brigade-Surgeon-Lieut-Col. Banks*: It appears to me that our position is somewhat curious. Dr. Katrak proposes that a certain class of houses should have syphons, whilst the Commissioner says he will take good care that such houses shall not be without them. I do not think we can do much; we can hurry up with this matter. *Mr. Blaney*: I think we must be guided by the evidence and not be influenced by anything the Commissioner may say. Our report should be our report and nothing else. *Mr. Bhalchandra K. Bhatawadekar*: I agree with Dr. Blaney; we have only to regard the information before us and present our report to the Corporation on that.

Mr. Blaney: I wish to justify myself in the reference I have made to Mr. Smith. Your report involves financial considerations, and it is no use considering them at the end; let us do so as they crop up. Further, you must not distress a department like Mr. Smith's by sending for volumes of evidence at once. A question I wish to put to Dr. Weir is with regard to the running syphon. The Commissioner says: "I do not care a button whether you recommend them or not. I am the Municipal Commissioner and have every power and you need not bother." But we are going to make our report and we shall say: "if you have these syphons, they require cleaning." Mr. Smith says they have covers and that they seldom require cleaning, but require examining; therefore there must be a certain establishment to do this work; there must be a daily inspection. I am asking Mr. Smith to give the details of the establishment for the whole city, as every house will have this running syphon.

Mr. Bhalchandra K. Bhatawadekar: From the evidence that has been taken before this Committee and from the experiments that have been made at the instance of the Committee, are you, Dr. Weir, still of opinion that the running syphon is not a desirable thing to have in house-connections.

The Health Officer: I adhere to my previous view, and from the evidence taken before this Committee I am convinced more than ever that the running syphon is wrong, and in my opinion efforts ought to be directed towards designing a system by which the solids passed from the house should be removed in the sewer or sent to the pumping station.

Mr. Blaney: Dr. Weir has told this Committee that a certain establishment is required to examine these drains every day, and says there would have to be a water-supply also to flush the syphon. *The Health Officer*: Yes, if the syphon is to be kept clean.

Mr. Nanabhai N. Katrak: Dr. Weir has given certain evidence on this subject, and in order to refresh the Committee's memory I will read a portion of it. (Mr. Katrak read extracts from pages 198, 199, 200 and 201 of the Appendix to Vol. XVI of the *Municipal Record*.)

Mr. Blaney : We have no flushers at the heads of gullies.

Mr. Nanabhai N. Katrak : One is being tried at the suggestion of Dr. Cowasji.

Mr. Blaney : It would cost thousands of rupees to adopt the system ; Tansa would not be enough. Dr. Weir has referred to my speech at the introduction of Tansa. I asked the Corporation to accept Tansa under seventeen heads. One of those heads was—Dr. Weir was Municipal Commissioner at the time, otherwise we would have had no Tansa—that every day every gully should be flushed thoroughly under the superintendence of the Health Department. Dr. Weir said: "Do that, and what Dr. Blaney says is perfectly true, disease will be reduced, and the mortality also reduced by ten per cent." This shows that the idea of flushing these gullies was confirmed in my mind on the day I asked the Corporation to sanction this scheme. I do not think Dr. Weir has gone far enough ; he is very timid where lakhs of rupees are concerned. The Health Officer in a great city must not stick at two or three lakhs if he is going to do a great deal of good. He put forward a scheme of fire engines by which the mosquitoes were to be driven out, and the sludge removed from between the houses.

Mr. Bhalchandra K. Bhatawadekar : That has been sanctioned.

Mr. Nanabhai N. Katrak : One engine. With regard to the evidence I have read, I have one or two questions to ask Dr. Weir. Do you object to the syphon because it is liable to choke? *A.*—Yes. *Q.*—It may contain some semi-fluid substance like cow-dung? *A.*—Yes, it would be a small cesspool. *Q.*—Taking that your catchpits are cleaned every day, and that they are not left to be a source of nuisance, then what would you consider more dangerous—gases coming out directly in a concentrated form from the sewers without a seal, or gases evolving slowly by the foul liquid, or coming through that liquid? *A.*—I only advocate catchpits under certain conditions, and the catchpits I advocate would be a perfectly open one ; a closed one is dangerous; it is a portion of the sewer, and is only minimised by its size.

Mr. Blaney : Your catchpit, if thoroughly cleaned in the morning, may be safely trusted to be all right for twenty-four hours, which is not so with the syphon? *A.*—Yes.

Mr. Blaney : Both are bad, but the catchpit is a quick decomposer? *A.*—Yes. What I hope is that with a greater pumping power many of the difficulties of the sewers may be surmounted.

Mr. Nanabhai N. Katrak : It is better to have gas evolved slowly than for it to come out with a rush? *A.*—Dr. Katrak bases his question on the assumption that the syphon will intercept the gases ; it will not, because it is itself foul.

Mr. Blaney : Do you or do you not advocate that it should be the duty of the Health Officer to decide what is to be put down in front of every house ; whether it should be a catchpit, syphon or what? *A.*—Certainly, he should have a voice.

Mr. Blaney : Ay, and a potential voice.

The Committee then adjourned till Friday, February 2nd proximo.

BOMBAY, 2*nd February* 1894.

AT the meeting of the Committee held this day, there were present :—

The Hon'ble Mr. Javerilal U. Yajnik, *Chairman* ; Ardasir D. Mody, Esq.; Brigade-Surgeon-Lt.-Col. S. O'B. Banks ; Bhalchandra K. Bhatawadekar, Esq. ; Thomas Blaney, Esq. ; Cowasji Pestonji, Esq. ; Fardunji N. Bisni, Esq. ; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Commissioner ; the Health Officer; the Drainage Engineer on Special Duty ; and the Secretary.

On the question of the signing of the minutes of the meeting held on the 26th ultimo, it was agreed that the following words on page 86 of the draft Minutes be struck out :—

" Taking the evils of both cases, Dr. Weir proposed a cesspit—that is, the nuisance arising from a choked siphon and a cesspit giving out gases in volumes. Dr. Weir said he would prefer the catchpit."

And that the following words be inserted in place thereof :—

" *Q.*—But assuming you abolish your siphon, you have no water seal at all between the grating which leads to the open and the sewer which conveys the sewage of one thousand houses. You nevertheless think it is more dangerous to protect buildings by means of a water seal than to leave it open and the smell from one thousand houses to come right up the gully ?

"*A.*—Putting it as you do now, I say it would be better to have a siphon."

Read the following :—

BOMBAY, 2*nd January* (Qy. *February*) 1894.

MY DEAR BLANEY,—I have not been asked to be present at the House Connections Committee to answer questions, &c., as to the last report I read to the Committee some weeks ago.

I should like an afternoon to be arranged for this purpose.—Yours sincerely,

D. GOSTLING.

No. T. D. 903 OF 1893-94.

BOMBAY, 1*st February* 1894.

TO THE MUNICIPAL COMMISSIONER.

SIR,—With reference to your No. 23224, dated 30th January 1894, I have the honor to observe that about 12,000 houses have been connected with the new system of sewers.

2. Every connection with the sewers is provided with a running siphon, and each siphon serves on an average for 2½ houses. The number of siphons in use is about 4,800.

3. The staff employed in cleaning house-connections is as follows :—

		Rs. per mensem.
6	Sub-Inspectors at Rs. 30	180
4	Mukadams at Rs. 15	60
4	Do. at Rs. 12...	48
9	Halalkhor Mukadams at Rs. 15	135
12	Do. Sub-Mukadams at Rs. 13	156
109	Halalkhors at Rs. 11-8-0	1,254
50	Labourers at Rs. 10	500
	Total Rs. ...	2,333

4. This establishment, however, cleans not only running siphons, but also gully traps and house drains, and it would be a very liberal estimate to assume that one-sixth of the establishment is engaged in cleaning siphons. The cost, then, of cleaning 4,800 running siphons may be taken as Rs. 390 per mensem.

5. I estimate that about 40,000 houses yet remain to be connected, and if each connection be provided with a running siphon, and if one siphon be taken to every $2\frac{1}{2}$ houses, there will be 16,000 siphons, and the cost of cleaning them at the same rate will be Rs. 1,300.

6. The total cost, therefore, of cleaning running siphons throughout the whole of the City would be Rs. 1,690 per mensem.

7. My experience is that a running siphon gives, as a rule, but little trouble; certainly far less than a gully trap.

8. I have known pipe-drains in house gullies to be choked whilst the siphons were clear.

9. The running siphons which we have used for several years past provide a sheer drop of 2 inches into the contained water, and this provision isan important element in keeping them in working order.

10. No modern sanitarian has ever ventured to suggest that a connection should be made between a house and a sewer without the intervention of a trap of some kind, and I trust that, if it be decided to abandon the use of running siphons, the House Connections Committee may suggest some equally good trap, though I know of none.

11. When fæces, urine, cookroom water, bathing water and similar matters now passed into sewers cease to be impurities, then, but not till then, will it be safe to make open drainage connections.

12. Every open connection with a sewer becomes a ventilator to the sewer and renders vent-shafts and similar appliances inoperative.—I have, &c.,

JAMES W. SMITH, M. INST. C. E.,
Special Drainage Engineer.

BOMBAY MUNICIPALITY.

No. 23567 OF 1893-94.

Passed on to the Municipal Secretary in reference to his No. 11400 of 29th January 1894.

H. A. ACWORTH,
2nd February 1894. Municipal Commissioner.

Read the following extract from the minutes of the Standing Committee, dated 31st January 1894 :—

"Proposed by the Hon'ble Mr. Javerilal U. Yajnik, seconded by Bhalchandra K. Bhatawadekar, Esq.—

"'That with reference to letter, dated 29th instant, from the Chairman, House Connections Committee, the Corporation be recommended to make a grant of Rs. 3,000 from the unappropriated balance of the Loan for 1st Drainage Section House Connections for payment to Messrs. D. Gostling, J. Hewson, and J. Wallace, Civil Engineers, for their valuable services to the Committee.'

"On a division, the proposition was *lost*, the votes being 2 *for* the motion and 7 *against* it."

On the motion of Ardasir D. Mody, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq., it was—

Resolved : "That, with reference to this Committee's Resolution of the 19th ultimo, requesting Mr. Wallace to furnish a special report on the result of his experiments at the cost of Rs. 500, Mr. Wallace be informed that such resolution has been rescinded."

Proposed by Nanabhai N. Katrak, Esq.—

"That a running siphon be placed between the street sewer and any arrangement for carrying off the water from the nahani."

Rider proposed by Mr. Blaney : "That in cases where the Health Officer certifies that a running siphon is objectionable, he may direct the substitution of another form of street connection."

This *rider* was accepted as part of the original motion, which was *carried*.

Mr. Nanabhai N. Katrak put the following question to Mr. Smith :—Is there sufficient water available to enable the Corporation to have the annular siphons which may be placed at the heads of gullies flushed completely once a day? *Mr. Smith* : That is a question that should be put to the Water Engineer as to cost and quantity.

On the proposal of Mr. Blaney, it was—

Resolved : "That the Water Engineer be addressed through the Commissioner, and asked to furnish the Committee with details as to the quantity and cost of the water required to be used daily for flushing purposes at the heads of gullies."

Mr. Bhalchandra K. Bhatawadekar : I believe that Dr. Weir has expressed himself against the siphons? *Mr. Nanabhai N. Katrak* : With certain qualifications. *Mr. Blaney* : He says they are not all alike. *Mr. Nanabhai N. Katrak* : He says he would do away with them where there is sufficient pumping power and ventilation. *Mr. Blaney* : They have gone on putting down siphons without

any regard to whether they are in the right place or not. *Mr. Nanabhai N. Katrak*: Are the annular siphons put anywhere? *Mr. Smith*: Yes. *Q.*—How many places, roughly? *A.*—Fifty different places. *Q.*—How many times during the day do they work? *A.*—That depends upon the manner in which the water cock is regulated. Most of them discharge once in two days. (A running siphon was exhibited to the Committee.)

Mr. Blaney: There are four to six gallons of sewage always in the bend of the siphon.

The Health Officer: An incrustation forms also, which can never be flushed off.

Mr. Nanabhai N. Katrak: Is it feasible, Mr. Smith, to place such annular siphons at the heads of every gully or of most gullies? *A.*—Most of the gullies. *Q.*—Is it possible to arrange these annular siphons at the heads of most gullies? *A.*—Yes. *Q.*—They discharge once in two days? *A.*—They are regulated according to the water-supply. *Q.*—Is it possible to discharge them every day? *A.*—That depends on the water-supply. *Q.*—Having regard to the quantity of water the City has to provide for other purposes, is it possible to make them discharge every day? *A.*—That is a question for the Water Engineer. *Mr. Nanabhai N. Katrak*: Supposing, Dr. Weir, these siphons were flushed every day, would you have any objection to the siphons? *A.*—I think my objection remains the same. *Mr. Blaney*: I don't think you will do any good in cross-examining an expert where life is concerned. *Mr. Nanabhai N. Katrak*: Under those circumstances, Dr. Weir, would you be prepared to accept Dr. Blaney's rider? *A.*—I think it is a safeguard. *Mr. Ardasir D. Mody*: Will the Committee know what form of house connection will be adopted? *Mr. Nanabhai N. Katrak*: It is for him to suggest at the time. *Mr. Blaney*: He has got to do it and take the responsibility; the whole thing is with the Health Officer. *Mr. Ardasir D. Mody*: How do the Committee know what the suggestion will be? We ought to know. I ask Dr. Weir what he will adopt.

The Health Officer: I am not committed to any form; nor am I prepared to say any general form will be adopted.

The Chairman: Dr. Weir has told Dr. Mody that he can give no definite answer; it will depend on the exigencies of the case.

The proposition of Mr. Nanabhai N. Katrak, with the rider of Dr. Blaney, was put to the vote and *carried*, Mr. Mody voting *against* it.

In consequence of the temporary illness of Mr. Blaney, the Committee adjourned at this stage until Friday, the 9th instant.

BOMBAY, *9th February* 1894.

AT the meeting of the Committee held this day, there were present :—

The Hon'ble Mr. Javerilal U. Yajnik, *Chairman*; Ardasir D. Mody, Esq.; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Fardunji N. Bisni, Esq.; and Nanabhai N. Katrak, Esq.

The Health Officer; the Drainage Engineer; the Drainage Engineer on special duty; and the Secretary.

John Wallace, Esq., was also present.

The minutes of the meeting held on the 2nd instant were signed.

Considered letter from the Commissioner, No. 23826, dated 5th instant, and memorandum from Mr. Smith, forwarded therewith, regarding the different schemes of connections.

No. 23826 OF 1893-94.

BOMBAY, *5th February* 1894.

THE MUNICIPAL SECRETARY.

SIR,—I have the honor to forward a memo. by Mr. Smith, Special Drainage Engineer, replying to criticisms on his designs and criticising (which he has done at my desire) the designs of others. With reference to what he says of the system at the Halalkhor's chawls, it is right that I should explain that this is not a system invented by Dr. Weir, but one designed by the Drainage Department of the Municipality under Mr. James. Be its merits or defects what they may; therefore the latter is the officer responsible for them. 2.—I beg to call your attention to the fact that in the proceedings of 8th December, p. 40, while you have printed letters from Mr. James and Mr. Thurley, you have omitted to print mine which should certainly be on the record, as it will be seen that Mr. Hewson immediately proceeds to refer to it and to say that he made no complaint as to the catchpit not having been cleaned. On 1st December (*vide* pp. 22-23) Mr. Hewson says : "By my letter "of 22nd August to the Deputy Executive Engineer (*sic*), I "requested that this catchpit be cleaned every fortnight. The pit "was cleaned on Monday, 28th August, and was not again cleaned "till Saturday, 18th November, being 83 days." (This is altogether erroneous.) "I found that the solid deposit from the sullage "had run over the catchpit weir, and that the floating matter had "accumulated four inches up the side. I never anticipated such a "test and find it was only the large area of cast-iron grating and "the concentration of liquid sullage which prevented the siphon "trap from being blocked." If this is not a complaint, I am ignorant of the meaning of English.—I have, &c.,

H. A. ACWORTH, Commissioner.

APPENDICES.

EXPERIMENTAL HOUSE-DRAINAGE CONNECTIONS.

Memo. prepared at the suggestion of the Municipal Commissioner.

My Design No. 1.

In the schedule which I submitted to the Committee I summarised the modifications as follows :—(*a*) No gratings in nahanis; (*b*) larger pipes, 3″ instead of 2½″; (*c*) larger cistern heads with wire cover; (*d*) down-pipes and gully traps placed further away vertically from the position of the nahanis; (*e*) the sloping pipe between each nahani and the cistern head provided with an open slit ½″ wide; (*f*) an open trough or channel provided with a catchpit and a grating, placed at the foot of each down-pipe, the catchpit overflowing into a gully trap. 2.—Of these, Dr. Weir notices only two, *viz.*, (*c*) the perforated covers over cistern heads, and (*f*) the open trough or channel. 3.—The means adopted to prevent leaves or refuse, as far as possible, from passing down the pipes into the cistern head, is the contraction of the orifice of discharge from the nahanis to a diameter of 1¼″. 4.—Dr. Weir says he does not look on the trough as an improvement. This may possibly be from his not knowing the reasons for which the trough was designed. 5.—The reasons were to obtain in a convenient form a catchpit to intercept solid matter and prevent it from passing into the gully trap and in addition, to admit of the down-take pipe being fixed at a distance from the gully trap, and from the catchpit, so that any emanations from the gully trap or from the catchpit might not be conveyed upwards by the down-take pipe. 6.—The sloping pipes with open slits between the nahanis and the cistern heads were designed for a somewhat similar reason, *viz.*, that the down-take pipe might be at some distance from the nahani and that any smell arising from the down-take pipe itself might not pass into the nahani and thence into the room. 7.—The success of the design is shown by the fact that the house drain has never been choked and that after nine months of use only a trivial quantity of sand was found in the siphon at the street end of the house-gully.

My Design No. 2.

8.—The objections which Dr. Weir takes to the contrivances outside the building are "that the gully traps are too small and that "the down-take pipes are too low in the traps." 9.—The traps are of the size used throughout the whole of the districts connected with the sewerage system and also in my design No. 1. 10.—The pipes dip into the gully traps to an extent of 1″, which is only just sufficient to prevent the water coming down the down-take pipe from spreading beyond the trap. 11.—I fail to see the necessity for a larger trap. It is large enough for the hand to be passed in at the side of the down-take pipe, and an unnecessarily large trap is, I think, to be avoided, as the smaller the exposed surface of water retained in the trap, the better it is. 12.—What Dr. Weir calls a catchpit or a cesspool, is a small trap holding less than half a gallon of water. To call this a catchpit or a cesspool,

is merely an inversion of the witticism involved in calling the "Atlantic Ocean" a "Herring Pond," or the "Tulsi Lake" a "tea-cup." 13.—The exposed surface of the water contained in the trap is probably the most important thing to consider and that surface is only 12½ square inches, while the exposed surface in the catchpits at Kharsetji Suklaji Street (which are properly termed catchpits) is 900 square inches or 72 times as much. 14.—A trap of this kind differs from a cesspool not only as regards size, but also in its practical effect. A cesspool is a receptacle for foul water in which the water remains stagnant until it is baled or pumped out, while the water in the trap is changed with every discharge, for water discharged into the trap displaces and forces out the water previously contained therein, and it is the last water poured in which remains to constitute the hydraulic seal. 15.—Dr. Weir's objection to the trap would seen to be equally applicable to the nahanis themselves, for they, being used for micturition and defæcation, must be and are foul, and are in the most dangerous position of being not only inside the building, but inside the sleeping rooms.

MR. GOSTLING'S DESIGN.

16.—Dr. Weir speaks of a gully trap in this design, but there are no traps of any kind, except the running siphon at the end of the house-gully. 17.—The down-take pipes are directly connected with the drain in the house-gully, and there is nothing to prevent the ascent of foul air from the drain through the down-take pipes into the rooms of the houses, except some small holes round the down-take pipes at the level of the paving, and these holes are very quickly choked. I fail to see any advantage in covering a drain and then, as it were, laying on the foul air therefrom to the nahanis, and through the nahanis to the rooms of the house. 18.—The gradient of the drain is very much too flat. The fall should be at least double, though the drain at the street end of the house-gully would in that case be very deep. 19.—That the drain has not a sufficiently steep gradient is shown by the quantity of silt which has accumulated therein. 20.—It is not to be supposed, as Mr. Gostling argues, that because so much silt has accumulated in his drain, a pipe drain would have been completely choked, for the sullage water in a confined pipe would have had much greater force in moving on the silt than the flow of the sullage in his drain. 21.—Although it is a convenience to be able to lift the cover-stones from the top of the drain for cleaning purposes, yet the labour in doing so, if the system were generally adopted, would be so great that practically the cover-stones would not be removed unless and until a drain were found to be completely choked. 22.—The cover-stones are easily broken, and if they were frequently removed the cost of renewal would be very great. 23.—The cover-stones cannot be perfectly air-tight, and therefore the system would be extremely dangerous, if introduced into the interior of houses as Mr. Gostling has done in one instance. 24.—The small grooves for the passage of storm-water are

altogether inadequate, being only about 1 inch wide and ½ inch deep. 25.—Mr. Gostling's more recent proposal to provide a semi-open drain for sullage water side by side with his covered drain, which he would reserve for the discharge from privies only, is, I think, the reverse of an improvement upon what he has carried out. 26.—The discharge from privies should be diluted as much as possible, and it would be very unwise to have a separate drain for such discharge, excluding the dilution, which would be afforded by the admission of water discharged from nahanis.

MR. HEWSON'S DESIGN FOR HOUSE WITHOUT A HOUSE-GULLY.

27.—The great object of this design is undoubtedly to obtain favour with house-owners by the abolition of the very wholesome provision of an open space around privies prescribed by Section 250 of the Municipal Act. Indeed we have it from Mr. Hewson himself that that is a great point in his system. 28.—The privies cannot be called water-closets because they are wanting in most of the essential characteristics of the latter. 29.—I consider the vent-pipe inside the vent-shaft a very dangerous arrangement, as it ventilates not only the house drain but also the street sewer, and an up-draught in the vent-shaft cannot always and invariably be ensured. 30.—I think, too, that the catchpit (Dr. Weir incorrectly calls it a cesspool) is a mistake, retaining, as it does, a large quantity of sullage with a large exposed surface. 31.—The arrangement also of discharging sullage from nahanis on one floor to others on the floors below is very objectionable, and no attempt whatever has been made to prevent the access into the rooms of any smell that may arise from the foulness of the down-take pipes. 32.—A drain inside a house is in a dangerous position and it never should be allowed except under the conditions which have been laid down by the Standing Committee, under Section 240 of the Municipal Act, for cases when no other means of drainage is available.

MR. HEWSON'S DESIGN FOR HOUSES WITH HOUSE-GULLIES.

33.—I fail to see any advantage in so laying the paving of the house-gully as to slope away from the street and carry the whole of the sullage to the remotest part of the gully, from which it has to return in the opposite direction towards the street. 34.—This would become particularly objectionable if the pipe drain were to choke, because all the sullage would accumulate and fester at the farther end of the gully. 35.—Storm-water too in the rains would run to the same point. 36.—Such an arrangement could be justified only if an automatic flush tank and annular siphon were placed at the remote end of the house-gully with the intention of never allowing anything but a rapidly discharged flush to pass through the house drain. 37.—The great object of this design also appears to have been to save the provision of the space around the privies prescribed by Section 250 of the Municipal Act, but that provision is a wholesome regulation, which should not be abolished.

38.—The catchpit at the remote end of the house-gully is another objectionable feature. 39.—The discharge of sullage on to the surface of the house-gully perpetuates the evil stenches, from which Bombay has so long suffered, and destroys the advantages which might be derived from the house-drain which is placed under the house-gully. 40.—In this instance no attempt has been made to exclude from the rooms any smell arising from the foulness of the down-take pipes. 41.—The system could not be applied to a majority of house-gullies in Bombay, because they are either too narrow, or the vent-shaft would block doors or windows.

Mr. Wallace's Design.

42.—This system is more objectionable than the old plan of running the sullage over the surface of the house-gully, because the sullage before running over the surface is retained in catchpits at the foot of the down-take pipe. 43.—Because of these catchpits, I had some difficulty in getting the work done, for when some catchpits had been formed, the landlord objected to the smell arising from them, and both he and the neighbours have never ceased to complain of the catchpits on account of the smell from them. 44.—The elaborate arrangement of a vent-pipe alongside every down-take pipe is a very expensive one, and I am doubtful if the advantages are commensurate with the cost. 45.—The house-gully is a very fair average gully, and much better than many others in Bombay. As Mr. Wallace considers that the gully is such a one as to render the experiment unsuitable, it follows that his design is unsuitable for the greater part of Bombay.

The Experiment at the Halalkhor Chawl in Kharsetjee Sukhlajee Street.

46.—The objectionable features in this scheme are the open catchpits, which have a large exposed surface of foul water. 47.—They are found to be a nuisance by the persons occupying the chawls although it may be supposed that their olfactory nerves are not of the keenest. 48.—I consider that the catchpits should be closed with a solid cover easily removable and the entrance to them should be trapped. 49.—The system would then be applicable to detached chawls, but it is not suitable for houses of the better class. 50.—For the sake of comparison, I have estimated the cost of the various systems that have been proposed as if they had all been applied to the house-gully in which my design No. 1 has been carried out. 51.—The following table gives the cost of the various systems without any allowance for contingencies or supervision:—My design No. 1, Rs. 721; my design No. 2, Rs. 488; Mr. Gostling's design (as carried out in Vithalwadi), Rs. 538; Mr. Hewson's design (as carried out in Modi Cross Street), but not including the fitting up of privies, Rs. 490; Mr. Wallace's design (as carried out in Shekh Memon Street), Rs. 577. 52.—I have also estimated the cost of a semi-open drain if applied to the same house-gully

including a catchpit covered with an iron plate, a running siphon and inspection inlet, two V-shaped channels, and a gully trap for storm-water, and fittings to the nahanis corresponding to those in my design No. 2. The cost of this would be Rs. 460.

JAMES W. SMITH, M. INST. C. E.,
Special Drainage Engineer.

BOMBAY, *2nd February* 1894.

Read the following:—

BOMBAY, *5th February* 1894.

To THE CHAIRMAN
OF THE HOUSE CONNECTIONS COMMITTEE.

SIR,—I have to forward herewith a copy of a letter, dated 22nd January 1894, No. 22481, received from the Municipal Commissioner, requesting me to connect the stable of my property situate at Grant Road with the Municipal pipe sewer. I cannot understand the justice of this action on the part of the Municipal Commissioner, since I know that a Committee of the Corporation is sitting at present to inquire into the existing system of house connections in Bombay. Owners of house properties are like the members of the Corporation and are awaiting the result of the enquiries made by your Committee. Until this result is known and the Corporation passes a decision upon it, I cannot think that the Commissioner can properly ask house-owners to make any sort of connections with the pipe sewers. Under the circumstances I request your Committee to move the Corporation, directing the Commissioner to stay further action in the matter until the Corporation has come to any definite decision as to the mode or modes in which house connections are to be carried out in the city. In connection with above, I trust your Committee will also deem it fit to state, for the information of house-owners what a house connection really means and whether it includes connections with stables, out-houses, &c., or not.—I beg, &c.,

VITHALDAS GOPALDAS.

No. 22481 OF 1893-94.

BOMBAY, *22nd January* 1894.

VITHALDAS GOPALDAS, Esq.

SIR,—With reference to your letter, dated 4th instant, I have the honor to inform you that the notice in question has reference to the drainage of the stable mentioned therein, which cannot be done at the Municipal expense. I have, therefore, to request that you will please have the work executed at once ; otherwise further action will be taken.—I have, &c.,

H. A. ACWORTH, Commissioner.

Mr. Bhalchandra K. Bhatawadekar : Before we proceed with this day's proceedings, I should like to know the object of the letters and what is to be done with them. I do not think the Committee requested the Commissioner to submit the report.

Mr. Nanabhai N. Katrak : The Health Officer was asked to report on the schemes, and it is only fair that Mr. Smith should have an opportunity of replying. It is a valuable record.

The letters were *recorded*.

It was *Resolved* : "That Vithaldas Gopaldas be referred to the resolution of the Corporation, dated 30th June 1892, and informed that any application he wishes to make on the subject should be made to the Corporation direct.

In answer to a question by Mr. Nanabhai N. Katrak, the Secretary said, no report had yet been received from the Water Engineer regarding the water available for gully flushing.

Mr. Blaney : It is impossible to vote on any part of the house connections which require flushing before we get the information asked for from the Water Engineer. It is an important statement, and Mr. Tomlinson should not be pressed.

The Committee then proceeded with the consideration of their report.

Mr. Nanabhai N. Katrak : At the last meeting we finished with the terminal part of the house connection ; we provided for a running siphon with power to the Health Officer to modify it in cases where it would be objectionable. The next thing to determine is the character of the conduit through which the water is discharged and is to be carried to the running siphon. Before we consider that, however, we have to determine the nature of the fluid which is to pass through the conduit. If the fluid was simply bath water, with scented soap and nothing worse than the perspiration of human beings, perhaps this Committee would never have come into existence, but it contains many things besides, which have no right to be there. It contains greasy substances, sand, ashes, vegetable choppings, animal refuse, such solid substances as fruit stones, sometimes little bits of stone, and, worse still, it contains besides urine and fæces. Ever since this state of things was brought to my notice, I have been enquiring from the people in the Fort, especially the Hindu population, and those enquiries show that the use of *nahanis* as latrines is more widespread than I believed it to be at one time. An explanation is that it is, to a certain extent, inevitable. We know that houses on the eastern side of the Fort are very large and each room is practically a house in itself, containing the husband, wife, children and relatives, and there they live, cook and do everything. It is almost impossible for young women and children to go from one end of the house to the other for natural purposes, and especially in cases of sickness these make use of the *nahani*. That being the case, we must also bear in mind that, in cases of cholera and dysentery, where people have to go to stool many times a day, the use of the *nahani* is unavoidable. Therefore, in considering the conduit, we should remember the character of the house and make a difference between big tenement houses and offices, as in the latter case little but bath water passes the connections.

"HOUSES WITH BACK AND SIDE GULLIES."

I take first of all houses in which the fluid from the *nahanis* is of a complex character, and we proceed to the consideration of tenement houses with back and side gullies. For dealing with these houses we have five schemes before us, and I put Mr. Gostling's as the central scheme. His scheme in one sense is an open channel scheme, and in another sense a closed channel scheme. On one side of Mr. Gostling's scheme I place Mr. Wallace's and the halalkhor chawl scheme, and on the other Mr. Smith's and Mr. Hewson's. Those who have been to Vithalwady and seen Mr. Gostling's scheme must have noticed many things, but most important was the collection of silt to the extent of ten inches. It was not only the quantity, but the fact that Mr. Gostling did not know of its existence. It had collected to this extent without giving notice to intelligent observers like Mr. Gostling and Dr. Viegas and Dr. Weir. Did you imagine there was silt to such an extent, Dr. Weir?

The Health Officer: I expected there was a large quantity by the smell.

Mr. Nanabhai N. Katrak: It was fortunate that the sewer still continued to flow, but the question arises whether the existence of so much silt was not a danger. Medical men know that decomposing organic matter in the vicinity of human beings is a serious matter, and it could not remain there without doing serious mischief. This is also the case in the scheme shown in the white model. Something of a very similar kind must be going on in the drain pipe under the gully, which only indicates itself when the pipe becomes choked. I, as a medical man, would therefore exclude that kind of conduit, for I could not allow in the vicinity of any house a conduit which would allow of the collection of silt in such a way, and so that it could not be known for months together. There is another objection to this white model, because we cannot see the interior of the pipe sewer; there are no movable covering stones, and if Mr. Gostling's drain is bad, this is worse in this sense. Having dealt with Mr. Gostling's, there is another system which claims our attention; that is the modification of Mr. Hewson's and Mr. Smith's No. 1. There is a catchpit, and an attempt is made to intercept the solids and allow only the fluids to pass into the drain. How far it is successful we do not know. It may be that only water is passing, or it may be that a small quantity of solid matter is going into the drain. We have no evidence before us to indicate the state of the pipe sewer. The idea is that, whatever precautions are taken, it is impossible to exclude completely the ashes which are generally suspended in the greasy fluid. Some must remain in the catchpit of Mr. Hewson and Mr. Smith, and some must pass into the drain, and in support of what I say I quote Mr. Smith's opinion on page 2, heading 7, of the letter just received. We were given to understand that the siphon contained a little sand, but did not choke; but in spite of the catchpit it is

impossible to exclude solids of the character of sand and ashes. Besides, in the case of Mr. Smith's No. 1 scheme it has another disadvantage: it acts something like a cesspit in the vicinity of the house, because there may be a number of *nahanis* along the side of the house, and the catchpits provide receptacles for decomposing matter. If they were emptied every day, it would do very well, but in a big city like this with forty thousand houses it is almost impossible to conceive that they could be cleaned as frequently as one could wish. Therefore, it is a disadvantage which I cannot think lightly of, and though Mr. Smith considers his catchpit a success, in the same report from which I have quoted he remarks, in connection with Mr. Wallace's scheme, as follows (quotes from heading 43). With regard to Mr. Hewson's scheme, it is very complicated and provides a nuisance as well as a source of danger. Whatever may be said against open gullies is applicable to his scheme, whilst he also has a closed drain. The same objections which I urged against catchpits apply to the catchpit of Mr. Hewson. It is impossible to exclude fæces and urine from a catchpit, and I cannot imagine such a hideous mass of solids remaining right in the house, in one sense, without producing epidemic. I cannot conceive of cholera motions remaining there without being of extreme danger. But apart from that, I fail to see on what data the ventilating shaft is designed.

Mr. Smith rightly said that the ventilating pipe is as likely to be a source of great danger as not. Besides, as I have said already, it is open to some of the objections which can be urged against the open system. I, for my part, do not see any advantage in the system, as the catchpit is right in the house—in one sense because of the privies. I cannot conceive the scheme being adopted by the Corporation. There are two other schemes—that of Mr. Wallace's and one at the halalkhor chawls. Mr. Wallace himself is not in favour of the catchpits and says that a catchpit in a gully is not advisable, so, if we exclude that, there is very little difference between the scheme of Mr. Wallace and that carried out at the halalkhor chawls. The moment the "down-take pipe" is terminated, the water is carried on the surface of the gully into an arrangement—a catchpit or whatever it may be. We have only to consider one system—the open system. It may be urged that the open system—knowing, as we do, that the fluid which would run over it contains urine and fæces—would give rise to excessive nuisance. There is no doubt it will create a nuisance, but we must consider the beneficial effect of the air and sun which could play upon the fluid. It will, no doubt, be a nuisance to the nose and eye, but in the other case of closed drains it is a danger, for there we bottle up the matter and allow it to discharge its noxious fumes in a concentrated form. Although the open system will be a nuisance, it is not likely to be a serious danger, and if we can depend upon a sufficient quantity of water and

have annular siphons placed at the heads of gullies and operating every day, and together with the fact that the Corporation is introducing fire engines for flushing, I am, therefore, of opinion that the fluid from the down-take pipe should be allowed to run along an open gully. As to the character of the surface of the gully in the red model, it is shown as of patent stone. We can rely upon that being water-tight, and little nuisance would arise from it, as the matter could only lie upon it in an infinitesimal thickness. If proper slope is given, it is almost certain that the liquid portion will be carried off as soon as possible. The objection of Mr. Gostling was that the cutchra might remain there and block the fluids passing to the end of the gully. This must be faced; sweepers clean gullies twice a day, and we may expect that such blocks will be removed. I, therefore, propose "That the sullage from the end of the down-take pipe be conveyed along an open channel in tenement houses with side and back gullies."

Mr. Ardasir D. Mody seconded the proposition.

Mr. Bhalchandra K. Bhatawadekar: The fluid is to run without interception until it reaches the sewer. *Mr. Nanabhai N. Katrak*: You have decided to have a siphon. *Mr. Ardasir D. Mody*: Who is to decide whether the house is one with sullage of a complex character or only one with ordinary bath water? *Mr. Nanabhai N. Katrak*: You might suggest. *Mr. Ardasir D. Mody*: I should say the Health Officer. *Mr. Blaney*: If this system will do for the complex sullage, it will certainly do for bath water. *Mr. Ardasir D. Mody*: I would suggest that the Health Officer be allowed to decide.

It was agreed to insert in the motion "houses which in the opinion of the Health Officer."

Mr. Ardasir D. Mody: What about privies? *Mr. Nanabhai N. Katrak*: We will continue the basket system. *Mr. Bhalchandra K. Bhatawadekar*: With the explanation of Dr. Katrak, I think the proposition is a good one—that is, if there is the necessary supply of water for flushing. If the drains are kept in a proper condition, I have not the slightest objection to them, but we have to consider the system in the light of the habits of the people, and I think an open channel of the kind proposed with all necessary means of flushing and keeping the gully as sweet as possible, would be really effectual; otherwise it may be a danger, although perhaps not so dangerous as Mr. Gostling's scheme. With proper safeguards I am for it. *Mr. Blaney*: That is our recommendation. *Mr. Bhalchandra K. Bhatawadekar*: I am afraid that, in spite of all our recommendations, the gullies will be left in a bad condition. *Mr. Blaney*: If that is the state of the Executive, we had better give up and do nothing at all. *Mr. Nanabhai N. Katrak*: Sweepers clean gullies twice a day. *Mr. Bhalchandra K. Bhatawadekar*: There is another objection. Water is running along a gully all day, and if it is cleaned in the morning, it will be dirty at night and may

become a serious source of danger. *Mr. Cowasji Pestonji*: In my opinion it will be quite impossible to ask the occupiers of the houses not to use the *nahanis* as latrines; even intelligent people in sickness will do it; and under those circumstances urine and fæces will flow over the gully and there will be refuse remaining there even after you wash the gully, and that will be a source of nuisance and danger. Unless we are assured that the gullies will be properly flushed with annular siphons and fire engines, we had better have a closed pipe with gully traps at the ends of down-take pipes. *Mr. Blaney*: That requires no flushing. *Mr. Cowasji Pestonji*: It does. *Mr. Blaney*: Yes, a good deal more.

Mr. Furdonji N. Bisni: This requires a good deal of consideration before we revert to the old system of open house gullies. We have the opinion of Mr. Baldwin Latham and of our Executive Engineers for closed gullies, and on the other hand the opinion of Dr. Katrak and the Health Officer for open gullies. We must balance these and vote accordingly.

Mr. Ardasir D. Mody: It is possible that pipes may be half choked and still running and the inmates of the house getting the full benefit of the bad gases. In the open system you can see what really exists.

Mr. Blaney: This question must inevitably be postponed. Here we are considering the rate at which solids will run in an open channel on some theory of flushing which will be carried out. We know nothing about the water. We must have the quantity and cost. This proposal may be quite correct in principle, but utterly impracticable. I propose that this be postponed until we get the Water Engineer's report, and after that I am going to ask to have the air examined in the existing gullies. We must have such information before we can formulate our report. I move "That the consideration of Dr. Katrak's proposal be postponed, pending the receipt of the Water Engineer's report on the water-supply available for gully flushing."

Mr. Cowasji Pestonji seconded the amendment.

The motion proposed by Mr. Nanabhai N. Katrak as thus amended and the amendment moved by Mr. Blaney read as follows:—

"House with side gullies and back gullies, in which houses the sullage is likely in the opinion of the Health Officer to be of a complex character.

"That the sullage from the end of the down-take pipe be conveyed along an open channel in the house gully."

Amendment—"That the consideration of Dr. Katrak's proposal be postponed, pending the receipt of the report from the Water Engineer as to the quantity and cost of the water required for gully flushing."

The amendment was *carried*.

Mr. Nanabhai N. Katrak agreed to the amendment, but did not know over what period the matter would be deferred, as the enquiries were not only as to water available, but as to the analyses of air in gullies.

Mr. Blaney: It is very simple to get the air analysed.

Mr. Nanabhai N. Katrak: We ought to state a period, and not only that, but the conditions under which the examination of the air takes place. With regard to the water question, Mr. Smith assures us he could give us annular siphons at the heads of most gullies which would discharge once in two days. The question is whether we could have them to discharge every day, and even if the water be small in quantity, it must be discharged with such rapidity to give it a certain head. Some time should be fixed for the air experiments; otherwise the whole thing will be at a standstill.

The Health Officer: If you are going to examine the air, why examine it under impure conditions? It would be better if a certain number of gullies were constructed, and then compare them with the gullies where you have a closed pipe.

Mr. Blaney: I will never sign a report unless it is proved up to the hilt.

Mr. Bhalchandra K. Bhatawadaker: Why not examine the gully in Bazar Gate Street, which is laid with patent stone?

Mr. Blaney: It would be worth while to make certain experiments. People die and disease extends because foul gases enter the windows of houses. The Corporation has asked us what shall be done. This is a Committee of vast importance and world-wide influence. It takes a great deal to understand anything about sewerage. I will give you one instance. Supposing Dr. Katrak's proposal is accepted, the cost of an open and a closed system is about ten lakhs in excess of the other. There is that important question behind it, but first of all we must take the sanitary question.

It was agreed that Mr. Smith be asked to show the Committee, at their next meeting, the condition of pipes in house drains in which an attempt has been made to intercept solids by means of catchpits, also pipe drains unconnected with catchpits, the condition of running siphons at the end of gullies, and of open drains in front of the new fountain.

The Committee then adjourned until Friday, the 16th instant.

BOMBAY, *16th February* 1894.

AT the meeting of the Committee held this day there were present:—The Hon'ble Mr. Javerilal U. Yajnik; Ardasir D. Mody, Esq.; Brigade-Surgeon-Lt.-Col. S. O'B. Banks; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Furdunji N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; Accacio G. Viegas, Esq.

The Drainage Engineer on Special Duty; the Acting Drainage Engineer; and the Secretary.

D. Gostling, Esq., John Hewson, Esq., and John Wallace, Esq., were also present.

The minutes of the meeting held on the 9th instant were signed.

Read the following letter to the Secretary, dated 15th instant :—

SIR,—With reference to the 2nd para. of the Commissioner's letter No. 23826 of 5th February 1894, you will please see, pages 40 and 41 of the proceedings, that my statement of the non-cleaning of the catchpit was necessary in answering the question of Dr. Katrak as to the capacity of the grating in preventing floating sullage blocking the syphon. The clear meaning of these words cannot be diverted by the Commissioner into a complaint. As the Committee have Mr. Smith's report on my system of drainage, I beg to submit my opinion on Mr. Smith's designs Nos. 1 and 2.

Mr. Smith's design No. 1.—Nightsoil and urine from the privies mix with the sullage in an iron trough on the surface of the gully. There is clear proof that this form of sullage is the principal cause of nuisance in gullies. 2.—The iron catchpits are little larger than the old gully traps, and there is clear proof by the old system that these fouled with solid sullage, leaves and solids thrown into the gully.

Mr. Smith's design No. 2.—There were four men with buckets of fresh water washing down the design, which should have been examined by the Committee in its ordinary condition. 4.—There is clear proof that the gully traps in the old system of connection fouled with solids from sullage, leaves and solids thrown into the gullies. This has not been obviated. 5.—There is no improvement on the old system ; there is clear proof that the drains will not work with solids passed into them.

Regarding Mr. Smith's report on my design without a house-gully.—Not a single one of Mr. Smith's objections is supported by facts. Why theorize when facts can be obtained from the drainage experiments which have cost you over Rs. 7,000 ? For instance, by Mr. Smith's theory the vent pipe inside the vent shaft is a dangerous arrangement ; yet what are the facts ? By model No. 1 you will see the only connection to the privies is at the top of the pipe fixed to the top sullage head, and there is no smell whatever in the topmost privy, the nearest accessible point.

My design for houses with house gullies.—The advantage of the gully sloping from the street is to prevent the nightsoil and urine floating over its surface. There is clear proof that nightsoil and urine floating over the gullies was hitherto the principal source of nuisance in gullies. Why theorize that the sullage from nahanis flowing over the surface of a house-gully perpetuates the evil stenches when the Committee have the important fact that the gully in Mint Road draining two houses is perfectly odourless. It is wrong for Mr. Smith to say that no attempt has been made to exclude from the rooms any smell arising from the foulness of the down-take pipes. Copper sullage heads have been fixed to the house in Mint Road connected to 4" down-take pipes, which have prevented any smell from entering the rooms. Mr. Smith is partly correct in respect of the house at the junction of Mody Street and

Mint Road, as he has neglected to fit the gratings to the sullage-heads required by me in proceedings of 23rd August 1892.

I would respectfully submit to the Committee that by any arrangement of house connection they adopt such system must secure the sullage passing into the drain free from solids and in a condition by which it will flow in the sewers to the outfall at Worlee. The present system of passing solids into the drains has converted the sewers into elongated cesspools for decomposing filth. Mr. Baldwin Latham ("Sanitation of Bombay," page 49), says: "The sewers of Bombay, instead of being put to their legitimate use, have been converted into under-ground receptacles of decomposing filth and, instead of flowing with an ever moving and living stream, are silted up with decaying matters, giving off deadly gases to the positive injury of the health of the people. I anticipate that the condition of the sewers this hot season will beat the record for foulness by the fact of the increased pumping power at Worlee removing large volumes of subsoil water that is constantly percolating into the drains and thereby increase the temperature of the sewer, promoting the rapid generation of gases which will take the place of the subsoil water in the soil. The fact of this subsoil water passing into the sewers is clear from the fact that the Corporation are now supplying 10 lakhs of gallons of water free to H. M.'s Mint on account of leakage from the Mint tank into the drain—value Rs. 500 per annum. Then you have the fact that, before the sullage was passed into the sewers, a seven horse power engine at Worlee could not keep down the subsoil water.—Yours truly, JOHN HEWSON, A.M.I.C.E.

Mr. Ardasir D. Mody: Unless this Committee asks for a report from gentlemen, I think it is not advisable to pass opinions on one and another's designs, as there will be no end to the criticism.

Mr. Furdunji N. Bisni: If the paper contains anything substantial, it had better be *recorded*.

The letter was recorded.

Mr. Gostling's House Connections.

Mr. Gostling read the following paper:—

[*Note.*—The diagrams illustrating the paper have been omitted on account of the cost of lithographing them. Ferrotype copies of the diagram are supplied.]

Suggestions showing how silt and kachra can be kept out of the gully sewer and water be allowed free admission.

1.—I am obliged to Mr. Smith for the short detailed criticism which he has made upon my proposals, circulated for the information of the Committee and dated the 7th instant. Such criticism is directly provocative of thought and thus leads to improvement. 2.—In my former report I stated that it was a *sine qua non* that the sand must be kept out of the gully sewer, and I made a modification of my proposals by which that could be effected. 3.—Mr. Smith, in his para. 25, objects to my modification because the sur-

face side drain proposed by me would keep the sullage water out of the gully sewer, and that the flushing of the gully sewer thus deprived of water would not be efficient. 4.—I give on a separate ferrotype plan (*see sketch, para.* 4,) my modification, which shows how easily the difficulty raised by Mr. Smith is got over by making a hole ¾ inch to 1 inch diameter every few feet along the bottom of the surface drain from B to C. 5.—The bottom of the surface drain should be almost level, made to a slope not more than ½ inch in each 10 feet, so as to settle the sand. At each hole B (*see sketch, para.* 5,) a shallow groove D E should be made in the bottom of the drain, in the centre of which the water flowing along the surface drain would collect and flow down the hole B in the gully sewer; the flat slope of the surface drain would cause the sand to settle along the bottom, while the water would filter through it and so enter the gully sewer, which would thus be kept free from obstruction and preserved for its legitimate use of a conduit for clear water. 6.—There are many gullies in Bombay so narrow as not to allow of the construction of a separate surface drain alongside the gully sewer. Such cases make it necessary to provide the modification shown (*see sketch, para.* 6). The surface of the cover stone to form the bottom of a shallow gutter not more than 2 inches deep, to have the shallow slope as described in para. 5, with the grooves D E at intervals, in which water would collect and flow down the holes F G, leaving the kachra and sand upon the surface for daily removal. 7.—I agree with Mr. Smith's para. 22 that the quality of the cover stones used by me is not good. I used them because they were easily procurable, easily dressed, and the cheapest material available for the experiment. For permanent work the blue basalt stone quarried in Coorla, and now largely used in Bombay for steps, is more suitable, as it is tougher and not so easily broken. A still more suitable material is a new quality of Porbandar stone recently discovered by Mr. Benson, formerly Assistant Engineer in the Bombay Municipality and now State Engineer at Porbandar. This is a lime-stone of a very hard, tough, and homogeneous quality and close grain, of which Mr. Smith has samples. 8.—I have made a new scoop or scraper with a long handle which I showed the committee at one of our inspections, the adoption of which makes it unnecessary to have my triangular cover stones over the gully sewer nearer than 16 feet apart. I now propose that these detached cover blocks, placed that distance apart, should be constructed of teakwood, which is an unbreakable material and much lighter to lift than stone, being not more than half the weight. 9.—These teak cover blocks should be 4 feet long, so that, when lifted, the opening would form a good inspection chamber, and easily admit the scoops when necessary for cleansing. 10.—But as by my new proposal the only connection from the moree pipes into the gully sewer would be through the holes B C (*see sketch in para.* 4 *and F G in para.* 6), and as these holes will be small in size, not more than one inch diameter, no kachra will find entrance into the gully sewer, which will thus fulfil its legitimate purpose of

carrying away only such stuff as is dissolvable in water. All sand and kachra will be retained by the shallow surface gutter. The water holes will keep the shallow gutter always dry, and thus the kachra while lying on the gully floor will be kept in a reasonably dry condition, free from decomposition while waiting removal. 11.—I claim that this simple modification now proposed by me is the best invention yet made for drying the kachra, for preventing kachra and sand from entering the gully sewer, and thus preserving the sewer to its legitimate work of carrying off speedily all dissolvable organic matter. 12.—*Mr. Smith's para.* 17—I have now given up all direct connection with the down-take pipes from the morees. 13.—*Mr. Smith's para.* 18—The proper gradient is a matter of practical experiment. All the Municipal experiments for the past 15 years have been vitiated by the necessity of an unduly sharp slope for carrying off the sand accumulations in the stoneware pipes. When the sand is excluded, a shallower gradient will be sufficient, especially with the ovoid bottom I have adopted. 14.—*Mr. Smith's para.* 20—My gully sewer is of the section of half an ovoid pipe and of the same width, viz., 6 inches ; it stands to reason, therefore, that sewage will flow faster along my gully sewer with its ovoid bottom than along a 6-inch circular pipe. The ovoid of my sewer is made of fine dressed Coorla stone and is quite smooth. If necessary, it can be made of glazed stoneware. I suggested this to Mr. Weir, but he did not consider it necessary. 15.—*Mr. Smith's para.* 21—He here admits that "it is a convenience to be able to "lift the cover stones from the top of the drain for cleaning pur- "poses." I thank Mr. Smith for acknowledging this. The convenience is immense and radical. Every cover block thus forms the lid of a direct inspection chamber. The question of the best material for the cover blocks is a matter for careful practical experiment. So far as I can see, teak is good, but cast iron is still better, and as the cover blocks are small in size, the adoption of either would not be more expensive than stone blocks. 16.—Though I understand it is no direct part of the work of the Committee, yet I cannot but point out how great an improvement it would be to adopt my design in para. 6 for street side drains. The drains and cover blocks would be somewhat larger in size than those needed for gullies, but the principle of construction is the same. The sand now daily washed in the monsoon from our streets into the public sewers would be intercepted by the shallow surface gutter at F (*see sketch, para.* 6). The water would immediately flow down the holes F G, but the sand would remain on the surface. If any carriage wheel got into the shallow gutter, as the gutter would only be 3 to 4 inches deep, the wheel would get out without damage, and all our streets could be utilized for carriage or foot traffic to their full width. 17.—*Mr. Smith's para.* 26—This is his principal objection. The modification I now propose entirely gets over the difficulty pointed out by him. As water free from sand and kachra will be admitted into the gully sewer along its whole length, the discharge from

privies will be amply diluted. 18.—I will now show how well the system indicated in paras. 5 and 6 lends itself to development in treatment (*see sketch, para.* 18). My scoop has a handle 12 feet long and will clean the sewer for a length of 8 feet each way; total 16 feet. The teak or iron cover block is 4 feet long. Total length from cover to cover 20 feet. The remaining 16 feet of sewer will be covered with ordinary flat covers made of Coorla stone, each with a groove as per sketch corresponding with the groove at F H, para. 6. 19.—I propose to cut eight grooves or channels like F G in para. 6 in the surface of the stone seating on each side of the cover block. These grooves to be as narrow as is consistent with utility. These grooves to be not less than $\frac{1}{4}$ inch wide and not more than $\frac{3}{8}$ inch wide for the purpose of passing the water, but stopping the passage of sand and kachra. They will thus act as very narrow gratings. Vegetable matter, such as broken leaf, mixed with mud would stick to the sides of the gratings, and retard the passage of sand and undissolvable earth which you wish to keep out of the sewer. A groove $\frac{3}{8}$ inch wide is a little broader than the thickness of an ordinary wooden lead pencil, and could at any time be cleared by a long iron nail or a bit of stick such as is used by natives for teeth-cleaning. A groove $\frac{1}{4}$ inch wide could only be cleared by a thin flat piece of iron, such as a bricklayer's trowel, which, if need be, the halalkhor would carry with him as one of his tools. 20.—But the aggregate size of 8 such grooves is very large. Thus 8 grooves each 8 × $\frac{3}{8}$ inch is equal to 24 square inches, being the area of a square hole 6″ × 4″. While if $\frac{1}{4}$ inch thick the area is 16 square inches equal to a square hole 4″ × 4″. The ordinary cover stone of a street drain has 5 holes each of the area of $1\frac{1}{2}$ square inches; total $7\frac{1}{2}$ square inches. My cover block would thus, with $\frac{3}{8}$ inch grooves, have three times the grating area, or, with $\frac{1}{4}$ inch grooves, double the area of the orifices in an ordinary sewer cover. 21.—My grooves, it is supposed, will close up partially with refuse so as to act as a filter to pass the water and keep out the sand. A larger pressure and quantity of water would partially wash out the grooves and pass the water, while, when a smaller quantity was flowing, the grooves would have a tendency to close partly up. But as the total length of the grooves or grating is 5 ft. 4 inches, there is ample margin for them to do their work efficiently. 22.—The sketch in para. 18 shows that the top surface of the cover block I J K L forms the bottom of a flat shallow cistern 3 inches deep, 4 feet long by 8 inches wide, equal to an area of $2\frac{2}{3}$ square feet, which will intercept all the water flowing on the surface and divert it into the sewer. 23.—I will now show how these grooved cover blocks form a means by which during heavy rains the floods can be kept from choking up the street sewers, *i.e.*, effect a simple separation of storm-water from sewage. The ordinary width of the groove is $\frac{1}{4}$ inch to $\frac{3}{8}$ inch. Make the top of this groove $\frac{1}{2}$ inch wide as sketch. Into this wider groove pack close by hand pebbles sifted to the size of $\frac{3}{8}$ to $\frac{1}{2}$ inch of stone or brick. The quantity of sifted pebbles required is so small, that a bullock-cart

will hold material sufficient for 1,500 cover blocks, or 6 miles of street side sewers. A few men would be sent round with hand-carts of the material, and when a break of fine weather came, the same men would pick the grooves of a proportion of the cover blocks, and clean them with a nail or trowel, *viz.*, those blocks at the foot of each street slope ; or, these cover blocks at street corners could always be kept open and the others closed during the monsoon. 24.—Though the area of the grooves is so large, equal to 24 sq. inches or a hole 6″×4″, yet the area of the cover block is 8 times the area of the grooves, and the area of the surface gutter from cover to cover is 40 times the area of the grooves. This shows how small a percentage of sand will pass through the grooves into the gully sewer and how efficiently such a system of cover blocks and grooves will work. 25.—I am rather inclined to think that the cover blocks can preferably be made of cast iron ; each casting ¾ inch thick 4 ft. long by 5 inch wide of my revised plan described later on would weigh ¾ cwt., or ½ inch thick ½ cwt. Such a weight could be easily lifted by two men. 26.—I have prepared a set of designs carefully drawn to scale showing my new proposals. *Design No.* 1 (see large plan) shows a teak cover block 4′ long × 9″ wide × 5″ thick, but as this is heavy and cumbersome, I prefer *Design No.* 2 with a teak cover block 5″ wide × 2½″ thick, which will weigh 20 lbs., to be lifted by one man. As there is an objection to teak, which might rot and crack and smell, *Design No.* 3 shows a cast-iron cover block 5″ wide. If ¾ inch thick, it weighs ¾ cwt., or ½ inch thick ½ cwt., to be lifted by two men or one man. *No. 5* shows a general longitudinal section of the surface gutter and cover blocks, the surface of the floor of gutter sloping one way. *No. 4* shows the same, with the surface of the gutter sloping both ways. This is, I think, preferable and will prove the most efficient. 27.—In a gully 2 feet wide and upwards, I show the surface gutter to be 1′ 2″ wide, which will leave a minimum width of 5 inches on each side for clean walking. In a narrow gully 1½ ft. wide the width of the gutter would be 1′, leaving 3 inches on each side clean and dry. But I think that the arrangement I propose will act so efficiently that the kachra will always remain dry, and the gutter will also be dry, except when the moree pipes are actually discharging sullage, because this sullage will only have to flow in the surface gutter a total distance of 8 feet. 28.—If the Committee wish, I shall be happy to relay the surface of my Vithalwadi gully as per Designs 2 and 3. I certainly think that this should be done, as it is by practical experiment only that difficulties are discovered and surmounted. 29.—From what I have already described in detail, as I believe I have now invented a simple automatic system by which sand, earth and kachra will be prevented from entering the gully sewer, it follows that the cesspit constructed by me in the Vithalwadi gully, a modification of which I described in my former report, will no longer be necessary—no cesspit will at all be necessary ; the small proportion of insoluble matter which may enter the gully sewer, will be

practically retained by the running syphon, and so be prevented from entering the street sewer. The running syphon should be constructed, not in the street, but in the gully, at its junction with the street, the final cover-plate being fixed at the end of the gully sewer next the syphon, so that it may be used for cleaning the same.

[Mr. Gostling, at the request of the Committee, undertook to furnish thirty copies of the diagrams for the use of the Committee.]

Mr. Blaney : Will Mr. Gostling tell the Committee what will be the cost of making the further experiment with his system? *Mr. Gostling* : Three or four hundred rupees, probably less. I propose to make new cover blocks of teak costing three or four rupees each. *Mr. Nanabhai N. Katrak* : How long will they last? *Mr. Gostling* : For ever. *Mr. Nanabhai N. Katrak* : They will be at one time in water and another time in the sun. *Mr. Gostling* : They may crack. What I suggest for a permanent job is cast-iron, but it would be a troublesome job as an experiment. *Mr. Blaney* : It is only an experiment and you can decide to have teak-wood or cast iron, or both, after. The question now to determine is whether you will give any attention to Mr. Gostling's suggestions. He considers that his experiment was not carried out with the fullest possible conditions for success, and that the experiment has taught him, as it is teaching engineers every day, that there were defects in his original idea. The question for us is whether it is justifiable to make these further experiments. *Mr. Gostling* : In the proposal I now make I believe that the sand can be kept almost entirely out of the drains, and if it can, I do not think the cesspit will be necessary. *Mr. Nanabhai N. Katrak* : The document is too important to give any opinion on at the present moment ; I suggest that it be printed and circulated and discussed at a future meeting. *Mr. Blaney* : Quite right. *Mr. Nanabhai N. Katrak* : I propose that that course be taken. *Brigade-Surgeon-Lieut.-Col. Banks* : I should like some little light thrown on this matter. Mr. Gostling has had his scheme before us already; I presume he is going to pay for these further experiments. *Mr. Gostling* : Why should I? *Brigade-Surgeon-Lieut.-Col. Banks* : The light that has fallen in upon Mr. Gostling after the experiment with his scheme may also have come to other engineers, and probably they also will want renewed experiments. We must have some finality. *The Chairman* : We must also consider what amount there is left of the grant. *Mr. Ardasir D. Mody* : I suggest a model be made of Mr. Gostling's scheme. *Brigade-Surgeon-Lieut.-Col. Banks* : That is a good suggestion. [It was decided to modify the model in the preparation of Mr. Gostling's scheme according to the new suggestions, and Mr. Gostling undertook to prepare a full-sized piece of the new cover in teak showing the grooves.]

On the proposal of Mr. Nanabhai N. Katrak, it was agreed that Mr. Gostling's paper be printed (without the diagrams).

It was agreed that the following series of questions put by Mr. Nanabhai N. Katrak be forwarded to the Drainage Engineer with the request that he will report thereon as early as possible :—

1. What is the greatest length of a gully in Bombay ? 2.—What is the average length of gullies in Bombay ? 3.—How many gullies are there roughly speaking ? 4.—What is the quantity of water that would be collected by 1 inch of rain falling in one hour on such gullies ? 5.—What is the quantity of water that would be collected by rain (10 to 15 inches) in 24 hours on such gullies ? 6.—Would rain water collected on such gullies, if allowed to go into the drains, embarrass the pumps at Love Grove ? 7.—What time would water take from the running syphon in the Fort to reach the pumping station ? 8.—What time would solids take to pass from a running syphon in the Fort to Love Grove ? 9.—What is the idea of the Drainage Department in connection with the construction of a settling tank at Love Grove ? Has it been given up or is it under consideration ?

On the motion of Thomas Blaney, Esq., seconded by Nanabhai N. Katrak, Esq., it was—

Resolved : "That the Committee now proceed to examine the pipes which Mr. Smith will show them in the Fort, reserving the other inspections which the Committee have resolved on making, until the meeting on Friday, the 23rd instant."

The Committee then resolved to proceed to examine the pipes which Mr. Smith was prepared to show in the Fort. The other places out of the Fort were not visited, it being decided to go there on the following meeting of the Committee.

Mr. Hewson's No. 2 Scheme.

The Committee proceeded to the site of this scheme, and the gully pipe having been exposed near the entrance of the gully, it was broken and found to contain one and a half inches of solid matter. The sullage was running freely. The pipe is 6 inches in diameter.

Mr. Hewson explained that the sullage had been flowing long before the catchpit was built ; the catchpit was only built in December last, whilst the pipe had been down ten months.

It was then decided to break the pipe inside the sewer. This was done and the pipe found to be perfectly clean. There was a slight smell.

Mr. James' Scheme.

The Committee then visited the experiment in Bazaar Gate Street laid in accordance with the principles of the "Red Model." The gully is paved with patent stone, and when visited was found to be acting, a constant flow of sullage running down the open channel.

Mr. Nanabhai N. Katrak said: This is a gully which drains a number of houses on the open system. Considering the fact that urine and nightsoil pass along the gully and that people throw all sorts of cutchra from their windows into the gully, there is comparatively little smell. The whole system is open; there is nothing hidden, and if care be taken to send sweepers regularly, I think the gully can be kept even sweeter than it is at the present time.

Mr. James: There is a constant flow of water.

Mr. Blaney: The smell is not offensive.

[Inhabitants of the adjoining houses complained that the sweepers emptied baskets of nightsoil at the end of the gully and passed it into the sewer at this point.]

The Committee then adjourned till Friday, the 23rd instant.

BOMBAY, 23*rd February* 1894.

THE meeting of the Committee called for this day was postponed by order of the Chairman until 2nd proximo.

BOMBAY, 2*nd March* 1894.

AT the meeting of the Committee held this day there were present:—

Bhalchandra K. Bhatawadekar, Esq.; Cowasji Pestonji, Esq.; D. A. D'Monte, Esq.; Fardunji N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Drainage Engineer on Special Duty, the Acting Drainage Engineer, and the Secretary.

On the motion of Bhalchandra K. Bhatawadekar, Esq., seconded by A. G. Viegas, Esq., Cowasji Pestonji, Esq., was voted to the chair.

The minutes of the meeting held on the 16th ultimo were signed.

Read the following:—

No. 7955-W, dated 15th February 1894.

TO THE COMMISSIONER.

SIR,—I have the honour, in returning your No. 24077 of the 8th instant, to state that I have ascertained from the Special Drainage Engineer that he estimates the number of house gullies requiring to be flushed at 20,800, and that the flushing tank in each case will contain 170 gallons. I also understand that each gully is required to be flushed once in 24 hours. On this basis the quantity of water required daily would be 170 gallons by 20,800, or a total of 3,536,000 gallons per day. This is, allowing for the loss by evaporation from tanks and leakage due to fittings out of order, practically equal

to the Tulsi supply, or to the supply which can be delivered by a 24" main. In my opinion the abstraction of such a quantity of water for this special purpose would be attended by considerable inconvenience to consumers in general, and I think it should be borne in mind that the demand for flushing would be the most urgent in the hot season, when the demand for all other purposes is the greatest. (2).—The general circumstances of our supply are, however, such that the Corporation must look forward to increasing the supply of water within the next ten years even if there be no specially heavy demand for flushing purposes. It seems to me, therefore, that it would be preferable to prepare for the supply of such a quantity of water as may be considered necessary for the effectual flushing of gullies. (3).—If flushing tanks were added to gullies it would be necessary in very many cases to engage a special staff, so that the tanks could be filled up and the flushing done at night in order that the pressure during the day may not be interfered with. There would be many cases in which 20 or 30 gullies would have to be supplied from one 3" pipe, and if these were being supplied, the pressure on the higher floors would be very defective even if the water succeeded in rising at all, for I may point out that the number of connections for gullies would be almost as large as the total number of water-connections at present in use. (4).—The cost of 3,536,000 gallons, with an addition of 5 per cent. for the losses above referred to, *i.e.*, a total of 3,712,800 gallons, would be, at 4 annas per 1,000 gallons, Rs. 928 per day, say Rs. 3,40,000 per annum; but if the second Tansa main were laid, the net cost to the Municipality for the additional quantity would not be over 2 annas per 1,000 gallons, and therefore the cost per annum would be reduced by ½ or say Rs. 1,70,000.—I have, &c.,

S. TOMLINSON, M. Inst. C. E.,
Water Engineer.

No. 24938 of 19th February 1894.

Forwarded to the Chairman, House Connections Committee; in reference to his letter, dated the 8th instant.—H. A. ACWORTH, Commissioner.

It was agreed that the Commissioner's memorandum No. 24938, dated 19th ultimo, and the accompaniments be *recorded*.

Mr. Nanabhai N. Katrak: As we are going to inspect the interior of the pipes laid under gullies, I think it would be a good opportunity to take the temperature of the air inside the pipes, and I therefore request that Mr. Smith be asked to take with him a thermometer. I also wish to put the following question: What amount of water is used for cleaning sewers and for such purposes at the present time?

Mr. Smith: I would rather not attempt to give a rough idea? I will give an answer by next meeting.

Mr. Nanabhai N. Katrak: You might also answer this question. The Love Grove Pumping Engines have been working

for six or eight months, and it was the opinion of many of us that, if the pumping power was strong enough at the stations, much of the choking of pipes would diminish. My question is, ever since these new pumps have been working, does the Drainage Department believe that the silt from the manholes and street sewers has lessened in quantity ?

Mr. Smith : The sewers are not in my charge.

On the motion of Nanabhai N. Katrak, Esq., it was agreed " That Mr. Smith be asked to report the approximate quantity of water used daily for flushing sewers and such like purposes ; whether the quantity of silt received from manholes and street sewers has lessened ever since the new pumps have been working at Love Grove ; whether, supposing all the solid matter, except such substances as stones and leaves, were introduced into the drains, instead of the attempt being made to intercept them at the gullies by catchpits and other contrivances, they would embarrass the pumps at the station or cause chokes in the sewers, or would the substance in question be carried to the settling tank at Love Grove."

The Committee then proceeded on its tour of inspection, visiting first the gully laid by Mr. James in Bazar Gate Street. Here the catchpit was opened and silt about 6″ deep was found.

Mr. Smith's No. 1 Experiment.— The running siphon was opened and about 2″ of silt found. This is the same siphon as was opened on the previous visit of the Committee to this gully. The gully pipe inside the gully was opened 20 feet from the first down-take pipe and above two catchpits and two traps. Here 1½″ of silt was found. The pipe beyond the running siphon was also opened and 1½″ of silt found. An unsuccessful attempt to take the temperature of the air inside the pipe was made.

Mr. Smith's No. 2 Experiment.—The running siphon was opened and 1 inch of silt found.

The pipe inside the gully above five traps was opened and only half an inch of silt discovered.

Girgam Road.—The Committee then proceeded to visit gullies that had been laid for three years. At the first gully visited, the pipe was opened about 50 feet from the head of the gully and beyond new traps 2¼″ of silt were found in the 6″ pipe. The running siphon was opened and 4″ of silt discovered.

At the second place visited, the 6″ pipe was opened and at the distance of about 30 feet from the head of the gully and beyond 4 traps no silt was found.

At this stage the Committee adjourned, deciding to visit the places prepared by Mr. Smith at Vithulwady and Cursetjee Suklajee Street at the next meeting of the Committee.

It was resolved, on the motion of Nanabhai N. Katrak, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq., that the Health Officer be requested to take the temperature of the air in pipe sewers at such places as he considers advisable.

The Committee adjourned until Friday, the 9th instant, at 3 p.m.

APPENDICES.

BOMBAY, *9th March* 1894.

At the meeting of the Committee held this day, there were present:

The Hon'ble Mr. Javerilal U. Yajnik; Ardasir D. Mody, Esq.; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; D. A. D'Monte, Esq.; Fardunji N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Health Officer; the Drainage Engineer on Special Duty; and the Acting Drainage Engineer.

John Wallace, Esq., was also present.

The minutes of the meeting held on the 2nd instant were signed.

Read the following :—

No. 26399 OF 1893-94.

BOMBAY, *6th March* 1894.

THE MUNICIPAL SECRETARY.

SIR—With reference to your No. 13069 of 2nd instant, which should, I may observe, have been addressed to the Commissioner, and not to the Special Drainage Engineer through the Commissioner, I beg to point out that the questions raised are rather for the Drainage Engineer than the Special Drainage Engineer. The latter knows nothing officially of the working of the new pumps at Love Grove. Before, however, forwarding the resolution to Mr. James, I would ask the Committee to consider whether such questions would not more conveniently be put *viva voce* to the officer concerned. This would save him the trouble of writing a report, and the answers would be equally on the record of the Committee.—I have, &c.,

H. A. ACWORTH, Commissioner.

Read also memorandum No. 26499 of 1893-94.

BOMBAY, *7th March* 1894.

TO THE MUNICIPAL SECRETARY.

[Municipal Secretary's No. 13199, dated 6th March 1894.]

The proper officer to address these questions to would be the Executive Engineer or Drainage Engineer, but the Commissioner must decline to call on either of these gentlemen for reports except on the requisition of the Committee. If the latter body wish to have this information, the Commissioner begs to renew the suggestion made in his No. 26399 of 6th March 1894 that the officers concerned should be asked to appear before the Committee and give it orally or in the form of a memo. to be handed in. This will save a great deal of trouble and will also enable the Committee to put on the spot any further questions which may suggest themselves.

H. A. ACWORTH, Commissioner.

It was agreed that the following question put by Mr. Nanabhai N. Katrak at the last meeting be submitted to Mr. James, the Drainage Engineer, with a request that he will answer the same, *viz.*, "Whether the quantity of silt received from manholes and street sewers has lessened ever since the new pumps have been working at Love Grove; whether, supposing all the solid matter, except such substances as stones and leaves, were introduced into

the drains, instead of the attempt being made to intercept them at the gullies by catchpits and other contrivances, they would embarrass the pumps at the station or cause chokes in the sewers, or would the substance in question be carried to the settling tank at Love Grove ?"

Mr. Nanabhai N. Katrak : When I put the questions it was my desire to receive answers in the manner suggested by the Commissioner, but we were given to understand by Mr. Smith that it would be more convenient to have the question thought out instead of answering it outright, and I was therefore requested to put the question on paper and forward it to Mr. Smith. Two of the questions were to be answered by Mr. James. We agree with what the Commissioner says, and it was only an oversight which has produced confusion. I sent Mr. Smith some questions a day or two ago, and I ask the Secretary to read them.

Mr. Nanabhai N. Katrak's questions as follows were then read :—

BOMBAY, 6*th March* 1894.

TO THE CHAIRMAN OF THE H. C. COMMITTEE.

SIR,—I have the honor to request you to be so good as to forward the following questions to J. W. Smith, Esq., M.I.C.E., Special Drainage Engineer, with a request that he will be so good as to reply to them in addition to the question already referred to him for reply on Friday last by the House Connections Committee at my instance :—1. What is the number of existing tanks in Bombay ? 2. Is it possible to connect with sewers all or some of them, and if so how many ? 3. If so connected, what quantity of water would be saved out of the amount at present used in flushing sewers and such other purposes and thus be made available for flushing the heads of gullies,—I have, &c.,

NANABHAI NAVROSJI KATRAK.

Mr. Nanabhai N. Katrak : As the questions were similar to those already asked, I forwarded them to the Secretary.

Mr. Blaney : That course is quite irregular ; the proper course was to address the letter to the Chairman of the Committee.

The Chairman : The Municipal Commissioner will take action only on the recommendation of the Committee.

Mr. Blaney : I was not present at the last meeting when Mr. Tomlinson's report was read on the water-supply necessary for flushing drains and gullies. I would like to know whether the Committee have decided anything on that letter.

Mr. Nanabhai N. Katrak : It was simply recorded.

Mr. Blaney : But the Committee have since addressed some questions on flushing to Mr. Smith and have given him the advantage of Mr. Tomlinson's letter ; therefore it is very desirable that I should say what I know about this question so far as the Corporation is concerned. My remarks are short, but very important. No one knows better than I do that, when the Tansa scheme was submitted to the Corporation, I asked them to sanction the great scheme because the disease and mortality of Bombay was greatly aggravated by the foul state of the gullies and sewers. I pointed out that they were extending their sewerage system and

making water-closet connections every day and that they had no water for cleansing them, that they were making filth and had no means of purifying, and that it was absolutely necessary for the considerations of purity and health that there should be a reserve of water available for this purpose and nothing else, and I put it in the fore front of my Tansa scheme that Bombay was making filth and creating nuisances and going on from bad to worse and spending money in ignorance of the consequences of their own acts. Therefore I said the least I can ask you to do in providing this water is to take from the Tansa scheme which I present to you. I did not call it the Tansa scheme as the word was dangerous then, but every one knew what I was talking about—five millions of gallons per day for the purpose of flushing drains, gullies, &c. I, therefore, anticipated Mr. Tomlinson by many years. Dr. Weir, who was then Acting Municipal Commissioner, made a speech much to the same purpose, but did not confine himself to the number of gallons. I myself spoke broadly of the quantity, but I made it understood that the Tansa scheme was necessary for this purpose as well as for providing water for household purposes. What I now wish is that not only this Committee should hear what I am saying, but that Mr. Smith, who is not quite familiar with the details of what happened on that occasion, should also know it. I do not think the Corporation has moved one jot from their original idea, namely, that a certain quantity of water should be brought into the city for this purpose. That water has not yet been appropriated.

Mr. Nanabhai N. Katrak : Will Dr. Blaney inform us whether it was contemplated, when the drainage scheme of the city was undertaken, to put it at such a level so that it might enable the municipality to connect the tanks with the sewers? I believe that that was the existing idea.

Mr. Blaney: Sir Guyer Hunter's report will give you that information. It was not contemplated. If it had been so, my proposal for these five million gallons would have been negatived by the Corporation. It could not have been done.

Mr. Nanabhai N. Katrak: With regard to the Bazar Gate Street gully, will Mr. James inform us how long, before our visit to the gully, the catchpit was cleaned.

Mr. James : I cannot tell exactly. It is emptied every three days.

The Chairman : What about the question you addressed to Mr. Smith, Dr. Katrak?

Mr. Nanabhai N. Katrak : I beg to lay it before the Committee with the request that it may be forwarded to the proper quarter. At the last meeting we received a report from the Water Engineer to the effect that a certain amount of water was required if we adopted a flushing arrangement at the head of each gully. I then asked a question to determine what amount of water is used at present for flushing sewers. We know that flushing is done by means of carts and fire engines.

Mr. Blaney : Why not ask for the quantity of water and the agencies by which it is used?

Mr. Nanabhai N. Katrak: I agree to that. It struck me that we might utilise the water lying idle in the tanks. With that view I have framed certain questions, which have already been read to you.

Mr. Blaney: I beg to point out that there is no water in any tank in Bombay at such a level that it will run into the sewers without first being raised by machinery. The whole principle of the water-supply of Bombay is that it is supplied at a higher level than the city, and it was always contemplated that by gravitation only could you cleanse your sewers. If there is any virtue in the questions put by Dr. Katrak, then use the whole of Pawai water. The question of raising water from tanks would cost a great deal more than Pawai. The reason why I object to this question is that, if we ourselves don't consider the whole subject of how this might be done, and if childish questions—I do not refer to Dr. Katrak—appear on our records, it might be said that the Committee appointed by the Corporation is not quite so good as the Corporation thought. Nothing can come out of the question; if you are going to cleanse the sewers, you must bring in the water by gravitation.

Mr. Ardasir D. Mody: Gullies are flushed by means of fire engines. Is it possible to take the water from the tanks?

Mr. Blaney: The question I should like to see put forward is "What are the best means the Engineers can devise of flushing between the houses?" Gullies must be foul under any circumstances, whether you have pipes or open drains. What then is the best way to flush them? You have been talking about automatic flushers, but there is such a thing as a hand-cart—an inexpensive arrangement—holding just as many gallons as you like and by which you can know better what you are doing than with automatic flushers. It is a question for the Engineers because it involves cost.

Mr. Ardasir D. Mody: I want to know whether it is possible to use the water in tanks in the way I have pointed out?

Mr. Wallace: I think I can answer that. A fire brigade engine is used each time the tank at the Yacht Club is cleaned. It is quite capable of pumping a sufficient supply of water to flush ordinary-sized sewers, but it will expose the mud and filth at the bottom of the tank to the sun and air, and medical men must say whether that is desirable or not.

Mr. Blaney: That happened at Babula tank. Enough water was pumped out to expose the bottom and kill thousands of people all over the city.

Mr. Nanabhai N. Katrak: I am quite alive to the objections with regard to some tanks, but there may be others capable of being joined with the sewers and give a sufficient head of water.

Mr. Blaney: How are you to get a sufficient head?

Mr. Nanabhai N. Katrak: When I brought forward a motion to have a tank converted into a swimming bath in consultation with the Health Officer, we came to the conclusion that a sluice might

be put in and connected with the sewer. That shows that it was capable of being connected. I do not wish to press my question in face of Dr. Blaney's information, but I believe there are many tanks capable of being joined with the sewers and given a sufficient head to propel the water into the sewers. That is the reason for bringing forward the question.

The questions were then withdrawn.

The Committee having heard from Mr. Weir that he would be unable to attend the inspection this afternoon at Vithalwady and Kharsetjee Suklaji Street, but that he would be very glad to attend if the inspection could be delayed,

It was *resolved* on the motion of Thomas Blaney, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq., "That the Committee decide to visit Vithalwady and Kharsetjee Suklaji Street next Friday, and that this be communicated to the Commissioner, so that Mr. Weir may have an opportunity of attending.

Mr. D. A. D'Monte expressed dissatisfaction that the Committee should meet and go away in this manner.

The Committee then adjourned to Friday, the 16th instant, at 3 P.M.

BOMBAY, 16*th March* 1894.

AT the meeting of the Committee held this day, there were present:—

Ardesir Dadabhai Mody, Esq.; Bhalchandra K. Bhatwadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; Fardunji N. Bisni, Esq.; Nanabhai N. Katrak, Esq.; and Accacio G. Viegas, Esq.

The Health Officer; the Drainage Engineer on Special Duty; the Acting Drainage Engineer; and the Secretary.

John Hewson, Esq., was also present.

Thomas Blaney, Esq., was voted to the chair.

The minutes of the meeting of the Committee held on the 9th instant were signed.

Read the following:—

GRANT ROAD, 15*th March* 1894.

TO THE CHAIRMAN, House Connections Committee.

SIR,—I beg to bring to your notice the state of the side gutters in the Khetwady lanes from 8th to the 2nd and also of the side drains of the Khetwady Back Road. Although there are house connections completed in this section, these side drains, which are intended for storm-water only and so ought to be dry in this season, are filled with sullage water to the extent of 2 or 3 inches deep. This state of things is said to be due to defective level of the drains. Although the Health Department sweep these drains twice a day, still the work done is very ineffectual, and these drains can never be well cleaned, because the sullage water, no sooner it is swept onward, flows back and thus forms a long continuous cess-pool day and night to the great detriment of the health of the people in the locality. There is a general complaint about it from the residents of the locality.—Yours faithfully,

ARDESIR DADABHOY MODY.

Mr. Mody: We are going to Kamathipura to-day and I propose that we visit this place on the way. I desire to bring this to the notice of the Committee to show that, although these houses in this part of the city have house-connections, it is possible to find sullage in the storm-water drains.

The Committee decided to visit Khetwady that afternoon, and the letter of Mr. Mody was *recorded*.

Read the following :—

No. D-8793 of 1893-94.

BOMBAY, 28*th February* 1894.

To THE COMMISSIONER.

SIR,—Referring to your No. 24986, dated 19th February 1894, I have the honor to reply to the questions *seriatim*. 1.—The longest gully in Bombay is one which runs between Kamatipura 5th Street and 13th Kamatipura Street and is 800 feet in length. 2.—The average length of gullies in Bombay is 76 feet. This result is obtained from an average of 80 gullies situated in Kamatipura, Agripada, Girgaum, and Fort. 3.—In the whole of Bombay there are about 21,537 house gullies. 4.—The quantity of water which would fall on 21,537 gullies due to an inch of rain in one hour would be 2,557,518 gallons, or 11,418 tons. This is taking the average gully as 3′ wide and making no allowance for the falling of rain from side roofs. 5.—The quantity of water falling on the gullies due to 10 inches of rain in 24 hours would be 25,575,187 gallons, or 114,180 tons, and due to 15 inches of rain would be 38,362,781, or 171,270 tons per day. 6.—If the main sewer ran full bore during the whole 24 hours, it would only discharge 53,424,000 gallons. The amount daily pumped at Love Grove in ordinary fair weather is 27,500,000 gallons; therefore 27,500,000+25,575,187=53,075,187, but a further amount of 4,000,490 gallons must be added to this as being the average extra amount of storm-water daily pumped during the monsoon, making a total of 57,075,677 gallons. The four Worthington pumps working together at Love Grove can in 24 hours pump 64 million gallons, but the present outfall sewer can only discharge about 40 million gallons per 24 hours. It will be therefore seen that, though the pumps could pump the amount of storm-water and sewage above mentioned, the outfall sewer could not discharge it. 7.—The time taken by water to flow from Mint Road to Love Grove would be 2 hrs. 22 mts.; from Crawford Market 1 hr. 46 mts.; from Khetwadi 10th Lane 1 hr. 6 mts.; from Bellasis Road and Ripon Road Junction 1 hr. 9 mts.; from Queen's Road, 1st Marine Street, 1 hr. 59 mts. 8.—This is a difficult question to answer because the word "solids" has not been defined:—(*a*) If night-soil is intended, the average velocity from the Carnac Bunder to Love Grove would be, if unobstructed, 3 feet per second. This would give 2 hours from Carnac Bunder to the Pumping Station. (*b*) If road-metal is intended, there would be very little likelihood of its ever reaching Love Grove unless artificial means were used. (*c*) If ordinary road sand is intended, such as is used for washing cooking utensils in Bombay, and if the sand could have a free way from Carnac Bunder to Love Grove,—that is to say, if the sewer was quite unobstructed by silt throughout,—I think it might be reasonably stated that the sand would take about 4 hours to reach Love Grove.—I have, &c.,

C. C. JAMES, A.M.I.C.E.,
Drainage Engineer.

No. 25985 of 1st MARCH 1894.

Returned. If possible, there should be an estimate including the water falling on gullies from roofs of houses. This is an obvious factor in the case.

H. A. ACWORTH, Commissioner.

APPENDICES.

No. D-9022 OF 1993-94.

BOMBAY, *9th March* 1894.

TO THE COMMISSIONER.

SIR,—Referring to your No. 25985, dated 1st March 1894, I have the honor to state that, as far as I have been able to ascertain, there are 5,000 gullies out of the whole total within the city with roofs of adjoining houses sloping towards them, but this can only be taken as approximately correct as it has not been possible to visit every individual gully. But that result has been obtained from an actual count of 14,000 gullies in A, B, C, D and G wards. 2.—Taking into consideration the sloping roofs adjoining these 5,000 gullies, the results in para. 4 must be altered. 3.—The amount of water which would fall on the total number of gullies in the city plus the amount falling from the roofs of the 5,000 gullies before mentioned and due to one inch of rain in one hour would be 6,515,849 gallons, or 29,089 tons. 4.—The amount of water falling due to 10 inches of rain in 24 hours would be 65,158,497 gallons, or 290,890 tons, and due to 15 inches of rain 97,737,746 gallons, or 436,335 tons. 5.—If these amounts be taken as approximately correct, as I think they are, it will be seen that, even with the very average day's rain of five inches, the amount of storm-water to dispose of would be 32,579,248, and if to this the normal amount of sewage due to the water supply is added, the result obtained is over 60 million gallons—an amount considerably more than the greatest discharge of the main sewer in 24 hours.—I have, &c.,

C. C. JAMES, A.M.I.C.E.,
Drainage Engineer.

No. 26776 OF 10th MARCH 1894.

Forwarded to the Municipal Secretary with reference to his No. 12288, dated 17th February 1894.

H. A. ACWORTH, Commissioner.

No. D-9207 OF 1893-94.

BOMBAY, *14th March* 1894.

TO THE COMMISSIONER.

SIR,—With reference to question forwarded from the House Connections Committee under your No. 26928, dated 12th March 1894, I have the honor to reply as follows :—(1)—The quantity of silt is decidedly lessening in the sewers, but I am unable to give any quantities because the effect of the constant low sewage is to draw the silt from the pipe connection and from the pipe sewers into the main sewers in large quantities, and even with that supply the silt has considerably diminished in the main sewers, and I have no doubt that, if catchpits were constructed and a silt-pit put in near the pumping station, the sewers would in a short time clear themselves. There is a constant movement of silt towards the pumping station always going on. (2)—If all solid matter except stones and leaves were introduced into the Bombay sewers and passed down to the pumping station at Warli, the effect on the pumps would be to very seriously impair their efficiency. 2.—The Worthington pumps are so constructed that the introduction of silt into the pump chambers should be obviated to the greatest possible extent. The effect of silt on the brass pump rods and the gun-metal rams of the pumps is to score them most seriously, and it becomes necessary within a very limited period to renew both rams and rods, involving a large expenditure. (3)—Putting aside the effect on the pumps, the silt causes a very serious obstruction to the flow of sewage, as it must be remembered that the sewers were designed to carry sewage and not collect silt. I am very strongly of opinion that it is of urgent necessity to provide a silt-pit at Worli, and if the open drain system is introduced, silt-pits also at the ends of all gullies or at the junctions of pipe sewers with main sewers and even with the silt-pit at the Pumping Station, it will be necessary to place silt-pits at the end of open gullies or at the junction of pipe sewers and main sewers.—I have, &c.,

C. C. JAMES, A.M.I.C.E.,
Drainage Engineer.

BOMBAY MUNICIPALITY.

No. 27336 of 15th March 1894.

Forwarded to the House Connections Committee. The subject of silt-pits on the main sewer is now engaging attention.

H. A. ACWORTH, Commissioner.

It was *resolved* that the above papers be *recorded* on the minute of this day's proceedings.

Mr. Mody : I would like to ask the Engineers through the Commissioner, what are the best means the Engineers can devise for flushing between the houses ?

The Committee agreed to the question, which was accordingly forwarded.

Mr. Nanabhai N. Katrak : I hear that there is a house situate at the junction of Gilder Street and Falkland Road, and newly sewered on the white model system, where the smell from the *nahanis* is so bad that the inhabitants of the house have had to block up the holes. This was not sufficient to stop the smells, and they have had to build over the *nahani* connections. This would be a good opportunity to have a look at this place if the Committee is agreeable. I think the Health Officer must have some information on the subject, as they have lodged a complaint.

The Health Officer : I have received a complaint.

The Committee then proceeded to visit the various places arranged on.

Mr. Wallace's experiment.—The inspection inlet at the foot of the gully was opened and ¾ of an inch of silt found. There was no silt in the catchpits inside the gully, although the water was dirty, varying from green to inky black in colour. The catchpit in front of the gully was found to be partially blocked and when the solids were removed the sullage ran off.

Mr. Gostling's experiment.—Here one of the cover-stones of the gully drain was taken up and 3 inches of silt were found in the drain. There was a very bad smell when the stone-cover was removed. The surface of the gully was covered with sullage and overflowing into the side gully.

The Committee then proceeded to Khetwadi, commencing its inspection of the storm-water drains near the 4th lane. The drains were found to contain several inches of sewage. Municipal men were engaged at the time in sweeping it away. The smell was very bad.

Mr. Blaney : The people are being poisoned.

Mr. Nanabhai N. Katrak : The bottom of the drain is covered with blue stone which has many small holes in it.

Mr. Ardasir D. Mody pointed out that although the drains had been swept five minutes ago, there had since accumulated 2 inches of sewage in them.

The same condition of things existed wherever the Committee examined the storm-water drains in Khetwadi.

Mr. Blaney : It is simply a cesspool in front of all the houses.

Mr. Ardasir D. Mody also pointed out that the people constructed small mud bunds in the drains in order to prevent the flow back of the sewage.

The Halalkhor Chawls.—Here the Committee examined the siphon near the gateway. No silt was found in the inspection chamber. A pipe between a catchpit and the running siphon was opened, but no silt found. There was a small collection of leaves and straw. The catchpit had been cleaned that day, but at the time of the Committee's inspection it was not running freely; the grating was obstructed.

Mr. Blaney considered that the catchpit should be boat-shaped and ovoid at the bottom.

The Health Officer considered it was too large and too deep.

A second running siphon at the end of the building was examined. No silt was found, but there was a floating collection of biddee ends, ashes, and the sweeping of *chuwlas*. Water was put in the catchpit to ascertain if it flowed freely. The distance of the catchpit was 50 feet from the siphon and two buckets of water occupied 12 seconds in reaching the siphon after being thrown into the catchpit.

Mr. Blaney: The water only trickles through.

Mr. Smith: There has not been a sufficient flush of water put in.

Mr. Blaney: I believe if you put the ocean in, it would be the same.

The Committee then adjourned and arranged to meet at the Municipal Hall on Friday, the 30th instant, at 3 p. m.

BOMBAY, 30*th March* 1894.

AT the meeting of the Committee held this day, there were present:

The Hon'ble Mr. Javerilal U. Yajnik, Chairman; Ardasir D. Mody, Esq.; Bhalchandra K. Bhatawadekar, Esq.; Thomas Blaney, Esq.; Cowasji Pestonji, Esq.; and Nanabhai N. Katrak, Esq.

H. A. Acworth, Esq., I.C.S., Commissioner; the Drainage Engineer on Special Duty; the Acting Drainage Engineer; and the Secretary.

John Wallace, Esq., was also present.

The minutes of the meeting held on the 16th instant were signed.

Considered the following:—

No. W-8934 OF 1893-94.

BOMBAY, 28*th March* 1894.

TO THE MUNICIPAL COMMISSIONER.

SIR,—I have the honor to state that I am not in a position to furnish the information asked for by the House Connections Committee.

2. This statement may appear unsatisfactory, and I should therefore explain that the supply to urinals and latrines, and that for flushing sewers and gullies, is not metered, nor is it given directly by this department.

3. Our night inspections show us that the flushing of urinals, &c., is much more frequent than appears to me to be necessary and that the quantity of water now being used might be materially reduced without reduction of sanitary efficiency, and I propose, as soon as meters can be spared for the experiment, to ascertain the actual quantity that is used in several typical cases.

4. I should point out that it is necessary to have service pipes to the tanks much larger than required for a continuous flow, because the pressure

of water varies; and if the pipe were so small as to give a sufficient supply only at full pressure, there would be risk of insufficient supply at times, and if large enough to give a sufficient supply at lowest pressure, there would be too much at full pressure. Regulation is, therefore, necessary, and it appears to me to be important to determine what the consumption really is, and to reduce this by suitable agency to what the Health Officer or Drainage Engineer may lay down as necessary.

5. Having no accurate data, my judgment cannot be taken as worth much, but it is possible that it might be desired, and I should therefore say, if compelled to mention figures, that at present ¾ million gallons per day would be sufficient for urinal, latrine, sewer and gully flushing, and that over 2 millions of gallons are now being consumed.—I have, &c.,

S. TOMLINSON, M. Inst. C. E.,
Water Engineer.

No. 28104 of 29th March 1894.

Copy forwarded to the Municipal Secretary for information with reference to his No. 13070, dated 2nd instant.

H. A. ACWORTH, Commissioner.

Mr. Blaney : Mr. Tomlinson says two million gallons are used. I put it on the introduction of the Tansa scheme, that five million gallons would be allowed for the flushing of gullies and sewers, and we are now already at two millions, and only one-third of the city under sewerage.

Mr. Nanabhai N. Katrak : Mr. Tomlinson says half a million would suffice.

Mr. Blaney : No doubt, in some places the water is wasted. Half a million gallons cannot be sufficient the way the gullies exist at present. The amount for flushing sewers, I understand, will always be large, because of the silt which will appear in the drains and sewers for all times unless the habits of the people change. In making our report, I am afraid we shall have to give Mr. Tomlinson the " go by " altogether. I don't think we should be prepared to say that half a million gallons per day would be sufficient for all purposes. I only mention this fact now, because in drawing up our report it will be of great importance to remember that. I propose that the letter be *recorded.*

Mr. Nanabhai N. Katrak : In connection with the remarks of Dr. Blaney with regard to the half million gallons required for cleaning sewers, Mr. Wallace in his evidence said that 7½ gallons was sufficient to clean the sewers in Cawnpore. *Mr. Wallace* : They are open gutters. *Mr. Blaney* : They can use brooms. *Mr. Nanabhai N. Katrak* : The last letter we had from Mr. James says that the silt is diminishing. He says that the pumping power being stronger and the flow quicker, it allows no deposit. It is fair to believe that the silt nuisance will be lessened. *Mr. Blaney* : That can be ascertained by observation; we have not yet made a single experiment in this direction when we had the old engines, and if we have no anterior data, posterior data cannot be of use. We know of no law in physics, which will enable these drains to run better now with silt in them than they did in former years. It is to be presumed that the flow will be much the same

whatever pumping power there is. *Mr. Nanabhai N. Katrak* : The physical law is that, if the flow goes on and the water is not dammed up, the silt will be less. *Mr. Bhalchandra K. Bhatawadekar* : That is assertion. *Mr. Nanabhai N. Katrak*: It is in the evidence. *Mr. Blaney*: Before you get any member to join you in that, let us have the facts ascertained. *Mr. Wallace* : There is something to go on in Baldwin Latham's Report. Figures are given showing the amount of silt in the main sewer. I think it came to 62° of the area of the sewer. I have heard that since that time the silt is considerably lower, and a greater amount is going to the pumps. It is only necessary to measure the depth of silt in the main sewer, and you will see how the matter stands. Personally I believe there is a less amount of silt, but it is easily verified. *Mr. Blaney* : We have a staff and we ought to have daily data on this head.

Resolved : "That Mr. Tomlinson's letter No. W-8934, dated 28th instant, and the Commissioner's endorsements thereon, No. 28104, dated 29th idem, be recorded on the minutes of this day's meeting."

Considered the following :—

No. D 9514-A of 1893-94.

BOMBAY, 30*th March* 1894.

To THE COMMISSIONER.

SIR,—Referring to your No. 27999, of 28th March 1894, and the question from the House Connecttons Committee regarding the flushing of gullies, I have the honour to state that I consider that the flushing of gullies can be more economically and satisfactorily done by means of a galvanized iron pipe than by an automatic flushing tank. 2.—An automatic flushing tank is very suitable for the flushing of pipe drains, but in the case of the flushing of gullies it is apt to flush at times when the sweepers are not present, leading to a waste of water. 3.—I, therefore, am of opinion that a 1½ inch pipe connected to the water main and laid up the side of the gully or attached to the house by means of brackets and taken to the higher end of the gully fitted with a stop-cock and a nozzle with a spread sufficiently wide to command the gully is the best way to cleanse gullies by flushing. This stop-cock will be opened with a special key by the Health Department Mukadum and the gullies can then be flushed at will when the sweepers are on the spot and without any unnecessary waste of water or delay. 4.—The nozzle is removable and will fit all the pipes in the different gullies. A short length of hose will also be provided to connect with the pipe for washing the sides of the gullies ; when necessary, to this also the nozzle can be fixed. 5.—The accompanying plan shows in detail what I propose. 6.—The cost of this would be about a third of the cost of fixing an automatic flushing tank.—I have, &c.,

C. C. JAMES, A.M.I.C.E.,
Drainage Engineer.

No. 28232 of 30*th March* 1894.

Forwarded to the Municipal Secretary.

H. A. ACWORTH, Commissioner.

Mr. Blaney : This is important. We have three important considerations involved in this letter, and one is that Mr. James introduces a new principle of flushing gullies which meets, so far as I can see at present, with my hearty approval. I think this plan is better than the others suggested, because the men who do the work, pro-

perly superintended, will have to give an account of the way they have done their duty from day to day. Another important consideration is that it will be an expensive business, but it is absolutely necessary to my mind to keep these gullies clear and in a thoroughly sanitary condition for by so doing you will effect a tremendous good. The way the houses are built actually forms part of our sewerage system, and it is the worst feature in our sanitary systems. The amount of water saved in this system of Mr. James will pay for the appliances. What Mr. James recommends, therefore, is not an extravagant scheme if it is to supersede the automatic flusher. We were at one time told that everything would work of itself for ever and for all times, it would never need looking to or repairing, and that everyone might go to sleep and believe that the city was sewered for good and all. Some strange things have been talked at that table, more strange than is to be found in the "Arabian Nights." However, people are more enlightened now. This is a most important proposal, and when we formulate our report we must give it very great consideration. The only incompleteness of the report is that there is no estimate of the cost. I would like a rough estimate, say, of ten gullies of 100 feet long. With those figures it would be possible to roughly estimate the cost for the whole city. *Mr. Wallace* : There is one matter which arises out of this report. I am reminded by the words of Dr. Weir on a previous occasion, that the walls of the gully need more flushing than the floor. It would be well to be assured that this scheme provides for the walls and that there is sufficient pressure, and that the hose could be carried from one gully to another. The washing of the walls is a very important part as their area is very much greater than that of the gully. *Mr. Blaney* : There is one point Dr. Weir did not consider, and that is that all bacteria germs, mosquitoes and living abominations of that kind, and the foul smells are formed below in the matter which lies on the surface of the gully and cannot get away. The walls are dirtied undoubtedly by people throwing things out of their windows, and it would be a very good thing if we had a few young women to clean them, but if I were asked to state the relative importance of the fouling of the walls and the fouling of the floor, I would say that the walls only represented five per cent. of the danger. The only thing which remains to make Mr. James' report a complete and valuable one is an estimate of the quantity of water that would be used in ten well-paved blue stone gullies.

Proposed by Thomas Blaney, Esq., seconded by Nanabhai N. Katrak, Esq. —

"That the Commissioner be asked to furnish the Committee with an estimate of the probable cost of flushing daily 10 gullies of 100 feet each in length."

Carried.

Mr. Blaney : We are now at Dr. Katrak's programme. *Mr. Nanabhai N. Katrak* : When we postponed the discussion, the proposition I had before the Committee was as follows :—"House

with side gullies and back gullies, in which houses the sullage is likely, in the opinion of the Health Officer, to be of a complex character. That the sullage from the end of the down-take pipe be conveyed along an open channel in the house gully." To this there was the following amendment which was *carried* :—"That the consideration of Dr. Katrak's proposal be postponed, pending the receipt of the report from the Water Engineer as to the quantity and cost of water required for gully flushing." The report has been received and considered.

Mr. Blaney: Dr. Katrak's proposal means a new departure in houses with side and back gullies, and it amounts to this that, where formerly there existed pipes and automatic flushers, there should now be merely an open channel. We have evidence before us, on which the Committee will be able to formulate an opinion, to say whether this is right or wrong. It is an important matter for, if you recommend the Corporation to adopt the views of Dr. Katrak after what you have seen of the experiments of Mr. Smith, Mr. James, Mr. Wallace, Mr. Hewson and Mr. Gostling, you will be confronted by the whole sanitary world who have shut out the open system. It will, therefore, be for you to defend yourselves as best you can by showing that the habits, or the climate, or the seasons of Bombay conduce to force this conclusion upon you. Whilst the closed system might be scientifically demonstrated in the lecture-room to be right, you must be able to show that your experiments have shown the open system to be the correct one for Bombay and the most likely to be conducive to health. The Shone system will be working before our report is ready, and it is certain to tell us things we did not know before. Probably it is all written in books, but it is far better to study it in the working in Bombay. I am certain there will be great revelations which will make this Committee pause before making its report. So far as the open gullies go, however, it is ready for us now to vote upon; the only objection to proceeding to vote now is the number of members present. The Corporation appointed twenty-one members to act on this Committee, and we are now the smallest possible minority of that number. I have experienced the same thing on many Committees, namely, that there are members earnest and anxious and who will sit and formulate certain views ; then when they are placed before the Corporation, the men you have to fight the hardest are the absentee members of your own Committee. I think it ought to be made known that next Friday we will be prepared to vote on this important question of open gullies. Members will then have an opportunity of being present, and if they are not present they must hold their peace.

Mr. Wallace : I should like to add one word to what Dr. Blaney has said with regard to open gullies. The only ground, on which fault can be found with the change, would be based on the rate of decomposition and putrefaction of sewage in the sewers and in the gullies. That is a question for the Health Officer to settle. He can

say what is the rate of decomposition in one and the other. The sewers underground will not work unless ventilated, and here in Bombay a large number of ventilating shafts have been erected, but in spite of that there are many stinks. Unless the other party prove that the rate of decomposition is much less in the sewers than in the gullies, the Committee will have made out a good case. The report of the Committee will not be complete until it is strengthened by the report of the Health Officer on the rate of decomposition.

Mr. Nanabhai N. Katrak : We have already asked for the temperature of the air in sewers.

Mr. Wallace: Observations are taken at Colaba Observatory above and below ground, and they ought to be of assistance to the Committee. I am sure it would not take 12 months, or anything like it, to establish the reasons of this Committee with regard to that question.

Mr. Ardasir D. Mody : The executive officers of the Municipality are present at this meeting. It would be only fair to give them an opportunity of giving their opinions on this question.

Mr. Blaney : I think it is necessary for the proper movement of this Committee that the Health Officer should be present at each meeting. Here we come to a question, I know Dr. Weir has already given an opinion on, because he says the open drains in Kamathipura are correct things ; therefore his opinion on this is a foregone conclusion. In Mr. Wallace's suggestion, however, there is an absolute test and if the Health Officer had been present and he might have said he would be able to give us the report on this matter in a fortnight, or he might have said three months. The voting on the whole matter should be done by a full Committee, and if we are not successful in getting a large number of members to be present, I shall propose that this Committee be a Committee of the whole Corporation. Whatever is then done cannot be questioned.

Mr. Nanabhai N. Katrak : With regard to the point raised by Dr. Blaney and Mr. Wallace, I would say that, of course, temperature is an essential thing; but looking to the variations of the seasons, the temperature taken this season would not apply to the next. If we want to take the temperature, we must do it all the year round. Those who have received Corporation agenda papers for next month will see that I have a notice of motion that air temperatures should be taken for the whole year. Of course it is impossible for this Committee to wait until that is done.

Mr. Wallace : The mean annual temperature is 79·13°, the range of temperature is very little, and most of the information might be got at Colaba. It is not a thing which will involve protracted observation.

Mr. Nanabhai N. Katrak : How long will it take ?

Mr. Wallace: That is for Dr. Weir to say. Six months contain the whole range of climate of the year.

Proposed by Thomas Blaney, Esq., seconded by Bhalchandra K. Bhatawadekar, Esq.—

"That the Commissioner be requested to furnish the Committee with a report of the phenomena of decomposition on the surface of a gully, and in the pipe drains, respectively, for the purpose of comparison."

Carried.

Mr. Cowasji Pestonji: With regard to Mr. James' letter, would his flushing arrangements be suitable for closed pipes?

Mr James: No, Dr. Cowasji.

Proposed by Thomas Blaney, Esq., seconded by Ardasir D. Mody, Esq.—

"The Committee having considered, as fully as they could, the subject of open, against closed, drains to houses with side and back gullies, the subject is now ripe for voting upon. It is, therefore, considered desirable that before a vote is taken on such an important matter, a full meeting of Committee should be present. Unless this full meeting is secured, the minority who usually attend the meetings feel that it is undesirable to decide the question."

Carried.

The meeting then adjourned until Friday next, the 6th April.

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